

## **DCMA MANUAL 3101-02**

### PROGRAM SUPPORT ANALYSIS AND REPORTING

Office of Primary

**Responsibility:** Program Support Capability

**Effective:** November 22, 2017

Releasability: Cleared for public release

**New Issuance** 

**Implements:** DCMA-INST 3101, "Program Support"

**Incorporates:** DCMA- INST 205, "Major Program Support," December 4, 2013

DCMA-INST 406, "Defense Acquisition Executive Summary

(DAES)," July 1, 2013

DCMA-EA PAM 200-1, "Earned Value Management System (EVMS) – Program Analysis Pamphlet (PAP)," October 29, 2012

**Internal Control:** Process flowchart and key controls are located on the Resource

Page of this manual.

**Labor Codes:** Located on Resource Page

**Resource Page:** <a href="https://360.dcma.mil/sites/policy/PS/SitePages/3101r.aspx">https://360.dcma.mil/sites/policy/PS/SitePages/3101r.aspx</a>

**Approved by:** David H. Lewis, VADM, USN, Director

**Purpose:** This issuance, in accordance with the authority in DoD Directive 5105.64:

- Outlines procedures on how the Agency will report on program performance and anticipated performance to program, product, and project offices and the OSD in accordance with Federal Acquisition Regulation 42.302 (a)(67).
- Provides and defines procedures for Program Support analysis and reporting to include Program Assessment Reports, Program Notifications, Program Support Team and Support Program Support Team Inputs to Program Integrators and Support Program Integrators and Defense Acquisition Executive Summary reporting.

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#### **SECTION 1: GENERAL ISSUANCE INFORMATION**

- **1.1. APPLICABILITY.** This issuance applies to all DCMA Components, DCMA Operational Units, and DCMA Contract Management Offices (CMO) involved with Program Support (unless it conflicts with higher-level regulations, policy, guidance, waiver, or agreements, in which case those take precedence). Requests for exception to this manual must be addressed through the waiver process in the DCMA Manual (MAN) 501-01, "Policy Issuances Procedures." This manual applies to analysis and reporting on Major Programs, Non-Major Programs with Reporting Requirements, and High Visibility Commodities.
- a. Major Programs. The requirements of this manual apply to all programs identified as Major Programs.
- b. Non-Major Programs with Reporting Requirements. The requirements of this manual apply to all Non-Major Programs with reporting requirements as clarified below:
- (1) Section 3 Section 3 requirements apply only as needed to meet the negotiated reporting requirements (e.g., electronic Functional Input Template (eFIT), the Production Supportability Table, Earned Value Management (EVM) analysis, the Prime Control of Subcontractor Assessment (PCSA), the Program Assessment Report (PAR), the Support PAR, the use of Program Support Teams (PST) and Support Program Support Teams (SPST)). The PST Collaboration Site must be used for non-major programs with reporting requirements.
- (2) Paragraph 4.1 For PARs, only Executive Summaries are required. Other PAR narrative fields that are not negotiated for inclusion must contain "Not Applicable".
- (3) Paragraphs 4.1.c and 4.2.f Distribution of the PARs/Program Notifications (PN) will be accomplished by local procedures unless the PAR/PN represents a program which is contained within the approved distribution system per the Program Support Analysis and Reporting User Guide. In this case the PAR/PN must be uploaded to the distribution system.
  - (4) Paragraphs 4.3 Not applicable.
- c. National Aeronautics and Space Administration (NASA) Programs. The requirements of this manual do not apply to NASA programs. For NASA programs, refer to DCMA-MAN 3101-03, "NASA Support."
- d. High Visibility Commodities. The reporting requirements of this manual do not apply to High Visibility Commodities, refer to the High Visibility Commodity User Guide on the Resource Page.

#### **1.2. POLICY.** It is DCMA policy to:

a. Deliver global acquisition insight for all programs and High Visibility Commodities by providing objective, independent, relevant, timely and actionable information to the Acquisition Enterprise.

- b. Comply with Office of the Secretary of Defense (OSD) Defense Acquisition Executive Summary (DAES) Deskbook and OSD DAES Guidelines when reporting on DAES programs, specifically these 3 of 11 DAES assessment categories: Contract Performance Assessment (CPA), Production Assessment (PA), and Management Assessment (MA).
  - c. Execute this manual in a safe, efficient, effective, and ethical manner.

#### **SECTION 2: RESPONSIBILITIES**

# 2.1. EXECUTIVE DIRECTOR, PORTFOLIO MANAGEMENT AND BUSINESS INTEGRATION (PM&BI). The Executive Director, PM&BI, must:

- a. Ensure that Agency metrics are provided to the DCMA Director.
- b. Attend DAES or Service meetings as appropriate.

## **2.2. DIRECTOR, MAJOR PROGRAM SUPPORT (MPS) DIVISION.** The Director, MPS Division must:

- a. Ensure that DCMA Defense Acquisition Management Information Retrieval (DAMIR) inputs are validated and released.
  - b. Compile, publish, and disseminate the PAR Scoring Rubric and Rework Metric Results.
- c. Ensure that support is provided to the Operational Units in the evaluation of PAR quality, as needed.
  - d. Manage the DAES or Service meeting preparation process.

# **2.3. DIRECTOR, EARNED VALUE MANAGEMENT SYSTEM (EVMS) CENTER.** The Director, Earned Value Management System (EVMS) Center must:

- a. Perform all EVM System surveillance.
- b. Ensure supporting information concerning any "Disapproved" or "Not Evaluated" EVMS Contractor Business System (CBS) is provided to the Program Integrator (PI).
  - c. Provide an impact statement for any EVMS Corrective Action Request (CAR) issues.
- d. Provide follow up on system related issues, such as data integrtiy concerns or system performance.
- **2.4.** CORPORATE ADMINISTRATIVE CONTRACTING OFFICER (CACO), DIVISIONAL ADMINISTRATIVE CONTRACTING OFFICER (DACO), OR ADMINISTRATIVE CONTRACTING OFFICER (ACO). The CACO, DACO, or ACO must ensure required information concerning any "Disapproved" or "Not Evaluated" CBS is provided.
- **2.5. COMMANDERS/DIRECTORS, OPERATIONAL UNITS.** The Commanders or Directors, Operational Units must:

SECTION 2: RESPONSIBILITIES

- a. Ensure the Operational Unit representatives provide an independent evaluation of the quality of the CMO developed PARs.
- b. Ensure the Operational Unit provides PAR score, feedback, and recommendations to the PI, PI's First Level Supervisor (FLS), and CMO Commander or Director.
- c. Ensure the Operational Unit, in coordination with the CMO, jointly develop and implement a get well plan when the PAR quality is below the acceptable threshold.
  - d. Ensure the Operational Unit performs a follow-up review of PAR quality when required.
- e. Ensure the Operational Unit loads the DAMIR rework into the DAES Assessment Rework Database.
- f. Ensure the Operational Unit provides PAR health results to the MPS Division and the CMO.
  - g. Promote the use of predictive analysis throughout the entire content of the PAR.

#### **2.6. COMMANDERS/DIRECTORS, CMO.** The Commanders or Directors, CMO must:

- a. Ensure their CMO complies with the requirements of this manual.
- b. Review and approve PARs and PNs.
- c. Promote DAMIR assessments to PM&BI for validation and release.
- d. When applicable, ensure Production Supportability Tables are used.
- e. Promote the use of predictive analysis throughout the entire content of the PAR.
- f. Special Programs CMOs only comply with DCMA-INST 3101 and meet the intent of this manual to the maximum extent practicable for all Special Access Programs (SAP)/Sensitive Compartmented Information (SCI) contracts.
- g. High Visibility Commodities follow the High Visibility Commodity User Guide on the Resource Page.
- **2.7. DIRECTOR, SPECIAL PROGRAMS.** The Director, Special Programs must comply with DCMA-INST 3101 and meet the intent of this manual to the maximum extent practicable for all SAP/SCI contracts (including the designation of Lead CMO for SAP/SCI).

#### **2.8. PROGRAM INTEGRATOR.** The Program Integrator must:

a. Draft and submit PARs and PNs.

- b. Load DAMIR assessments.
- c. Review PST functional inputs.
- d. Review Support Program Integrator (SPI) Support PARs.
- e. Review PAR and PN comments.
- f. Distribute PARs and PNs.

#### **2.9. SUPPORT PROGRAM INTEGRATOR.** The Support Program Integrator must:

- a. Draft and submit support PARs
- b. Drafts PNs.
- c. Review SPST functional inputs.
- **2.10. PST AND SPST SUPPORT MEMBERS.** The PST and SPST members must document and submit functional inputs.
- **2.11. FUNCTIONAL FIRST LEVEL SUPERVISORS.** The Functional First Level Supervisors must review and score functional eFITs.

# SECTION 3: PROGRAM ANALYSIS AND INPUTS TO THE PROGRAM INTEGRATOR

#### 3.1. PROGRAM ANALYSIS.

- **a. Summary.** The PI and SPI rely on documented inputs from PST and SPST members to provide independent acquisition insight about the program to the DCMA customers. These inputs (e.g., eFIT, EVM Analysis input, PCSA, narratives supporting CBS status or impact, Production Supportability Table, and Support PARs) will reside in the program's PST Collaboration Site (see Resource Page).
- **b.** Conduct Program Analysis. Based on program risk and resources, PST and SPST members must perform their assigned surveillance and analysis activities identified in the Program Support Plan (PSP) or Support Program Support Plan (SPSP) and functional surveillance plan(s). In all cases, PST and SPST surveillance should be conducted with an emphasis on the cost, schedule, and technical impacts to the program, in addition to assessing contractor compliance to contractual and procedural requirements. The PI, SPI, PST, and SPST must engage with the contractor as necessary to perform PSP/SPSP surveillance and analysis activities.

#### 3.2. ELECTRONIC FUNCTIONAL INPUT TEMPLATE (EFIT).

- **a. PST and SPST Documents Program Analysis Results Using eFIT.** The purpose of the eFIT is to standardize PST and SPST member input for the creation of PARs and PNs by the PI and SPI. All PST and SPST member inputs must be through the use of eFITS. Exceptions are the EVM Analysis input, CBS status and impact statements, PCSA, Production Supportability Table, and Support PAR. For the PST and SPST members not required to use the eFIT, refer to the applicable section of this manual for input requirements. All eFITs must be completed in accordance with the appropriate section of the Program Support Analysis and Reporting User Guide found on the Resource Page. The eFIT must be provided via the program's PST Collaboration Site. Information included in the eFIT should provide justification and predictive analysis in support of the PAR and PN assessments by answering the following questions:
  - What is the issue, risk, opportunity, or observation (identification)?
  - Why does DCMA believe it is an issue, risk, or opportunity (independent assessment)?
  - Why does it matter (impact current and future)?
  - What is DCMA's suggested course of action for the government?
  - What is the contractor's root cause and corrective action?
  - What is DCMA's assessment of the contractor's root cause, corrective action, mitigation plan details, Estimated Completion Date (ECD), and cost impact, if known?
- (1) Frequency. At a minimum, PST or SPST members must provide weekly eFITs **or** a notification of "no input" to the PI or SPI in accordance with the PSP/SPSP. eFITs submissions can evolve as additional information is gathered through observations, trending, and information exchange. Periodic updates are encouraged for high risks and significant issues.

- (2) Accessing the eFIT Template. The eFIT template, DCMA-Form (DCMAF) 3101-02-02A, is located on the program's PST Collaboration Site.
- (3) eFIT Program Impact Rating. The eFIT is composed of several data input sections with each section having multiple data elements. All fields marked with an asterisk in the eFIT are mandatory fields. For any specific issue or risk, the generic rating definitions are:
- (a) Green: Some minor problem(s) may exist, but appropriate solutions to those problems are available, and none are expected to affect overall contract cost, schedule, and performance requirements; and none are expected to require managerial attention or action.
- (b) Yellow: Some event, action, or delay has occurred or is anticipated that may impair progress against major contract objectives, and may affect the contractor's ability to meet overall cost, schedule, and performance requirements or other major contract objective.
- (c) Red: An event, action, or delay has occurred or will occur that, if not corrected, poses a serious risk to the contractor's ability to meet overall cost, schedule, and performance requirements or other major contract objective.
  - (d) More detailed rating criteria is available in Appendices 4B, 4C, and 4D.
  - (4) Type. Risk, Issue, Opportunity, or Observation general guidelines are as follows:
- (a) Risk. An event or condition (contractor or program) that has not yet occurred, but may impact successful performance (cost, schedule, or technical). Risks can be either:
- 1. Program Office, DCMA, or contractor identified risks that the contractor is addressing. The risk and contractor action will be independently assessed by DCMA, as discussed in the "Documenting a Risk" section below.
- <u>2</u>. Program Office, DCMA, or contractor identified risks that the contractor is not addressing. The risk and resulting impacts, due to lack of contractor action, will be assessed by DCMA, as discussed in the "Documenting a Risk" section below.
- (b) Issue. An event or condition (contractor or program) that resulted in a negative impact to the program (cost, schedule, or technical).
- (c) Opportunity. A future event or condition (contractor or program) that may result in a benefit to the program (cost, schedule, or technical).
- (d) Observation. A noteworthy occurrence that has not been identified as a Risk, Issue, or Opportunity. Observations are not envisioned to have a significant effect to the program cost, schedule, or technical performance.
- (5) Input and Description. Functional Assessment and Predictive Analysis. DCMA's independent assessment of the contractor root cause, the corrective action, and mitigation should consider:

- Do we concur or not with the root cause?
- What other additional insights into the root cause do we have, if any?
- Is the recovery strategy executable?
- Will it achieve the desired results?
- Is the contractor executing to their plans?
- (6) Supervisor Review and Approval (Optional). Supervisory approval is not required for eFIT submittal unless a CMO requirement exists.
- **b. eFIT Quality.** The PST and SPST Functional Specialist's supervisor must periodically review a sample of their Functional Specialist eFITs to evaluate the quality and provide appropriate feedback to the originator.
- (1) Functional FLS Reviews eFITs Using eFIT Rubric. At least once per quarter, the PST and SPST Functional FLS must review at least one eFIT for each of their Functional Specialists assigned to a PST or SPST. To obtain the eFIT, go to the program's PST Collaboration Site. This review must be accomplished using the eFIT Rubric located on the Resource Page. The Rubric automatically calculates the score; scores below 85 percent are not acceptable.
- (2) Functional FLS Uses eFIT Score as Part of Functional Feedback. If the resultant eFIT score is below 85 percent, then the supervisor must discuss relevant opportunities to improve the quality of future eFITs.
- (3) Functional FLS Reviews Subsequent eFITs. If the eFIT score is less than 85 percent, the FLS must perform reviews of subsequent eFITs to ensure that the quality has improved to an acceptable level.

#### 3.3. PRODUCTION SUPPORTABILITY TABLE.

- a. The table provides insight into current and future contractor production performance. It supports and traces to DCMA independent projected delivery dates used in the PAR. The analysis details current delivery trends and creates an understanding of how future performance on remaining deliveries will either be met, slipped, or ahead of schedule. The table allows for quick quantification of items not meeting delivery dates and quantifying schedule underrun or overruns in terms of months. See the appropriate section of the Program Support Analysis and Reporting User Guide on the Resource Page. The Production Supportability Table must be developed at least quarterly to align with the PAR timeline but is not required for the following situations:
- (1) Low quantity deliveries (See the Program Support Analysis and Reporting User Guide)
  - (2) Sustainment deliveries
- (3) Engineering & Manufacturing Development (EMD) contract/Contract Line Item Number (CLIN)/Delivery Orders (DO)

- (4) Contract Data Requirements List (CDRL) Deliveries
- b. Upload Production Supportability Table(s). The Production Supportability Table(s), when completed, must be uploaded to the program's PST Collaboration Site. This is the supporting analysis for DCMA final projections provided and included in the PAR.

#### 3.4. CONTRACTOR BUSINESS SYSTEM REPORTING.

- **a. Summary.** CBSs are the first line of defense against fraud, waste, and abuse in DoD contracts. Contractors with approved business systems allow the contractor and the DoD to more confidently rely upon the information produced, which helps manage programs more effectively. For contracts subject to the Cost Accounting Standards and containing one or more of the following six business system clauses, the contractor must establish and maintain an acceptable CBS, as required by the following clauses:
  - (1) DFARS 252.215-7002, Cost Estimating System Requirements
  - (2) DFARS 252.234-7002, Earned Value Management System (EVMS)
  - (3) DFARS 252.242-7004, Material Management and Accounting System
  - (4) DFARS 252.242-7006, Accounting System Administration
  - (5) DFARS 252.244-7001, Contractor Purchasing System Administration
  - (6) DFARS 252.245-7003, Contractor Property Management System Administration
- **b.** Cognizant ACO Documents Reasons for CBS Disapproval or Not Evaluated. CBSs status and status date is populated from the Contractor Business Analysis Repository (CBAR). The cognizant ACO responsible for the CBSs must document reasons for any "Disapproved" or "Not Evaluated" CBS in the program's PST Collaboration Site. The pertinent information supplied must include (as applicable):
- (1) Pertinent information regarding DCMA's determination of CBS approval or disapproval or plans for the cognizant ACO to issue a final determination.
- (2) CBS status of "Disapproved" or "Not Evaluated" must address why the CBS is not approved.
  - (a) For Disapproved Systems, include the reasons for disapproval.
- (b) Impact(s) of transmitted Level III or IV Corrective Action Request (CARs) supporting CBS disapproval (if there is no impact to the reporting program, then state that); address actual or proposed date of submission for the Corrective Action Plan (CAP), DCMA's assessment of the contractor's status towards closing the CAR, and estimated time for follow-up review.

- (c) Identify whether or not a withhold was applied to the disapproved CBS. If a withhold has been applied, identify:
- $\underline{1}$ . Whether the payment withhold applies to the program (If it does not apply to the program, still identify the withhold but state that it does not impact program).
  - <u>2</u>. The estimated withhold percent amount.
- $\underline{3}$ . Whether the withhold is against progress payments, performance based payments, or interim payments billed under cost, labor-hour, or time and materials contracts.
  - (d) Upcoming reviews planned for a CBS.
- **c. EVMS Center Documents Reasons for EVMS Disapproval or Not Evaluated Ratings.** The EVMS Center may supplement ACO information concerning any "Disapproved" or "Not Evaluated" EVMS CBS in the Business Systems Input tab of the program's PST Collaboration Site. If provided, the supplemental information must include as applicable:
  - (1) Reason the EVMS is not approved.
- (2) For Disapproved Systems, include the reasons for disapproval (include the guideline numbers and titles that resulted in the disapproval) and must address reliability of the EVM data used in EVM analysis. If the data is determined to be unreliable it will have an impact the CPA rating.
- (3) Impact(s) of transmitted Level III or IV CARs supporting EVMS disapproval (if there is no impact, then state that); address actual or proposed date of submission for the CAP, DCMA's assessment of the contractor's status towards closing the CAR, and estimated time for follow-up review.
  - (4) Upcoming reviews planned for an EVMS CBS.
- **d. PI Reviews CBS Data and Determines Programmatic Impact.** The PI, in conjunction with the applicable ACO or EVMS Center, must identify any impacts to their specific program resulting from significant CBS issues in the Business Systems Input tab of the program's PST Collaboration Site.
- **3.5. EVM ANALYSIS.** EVM Analysis is performed for program conducting program reporting, containing contracts that have the EVMS clause, and the contractor is submitting EVM CDRLs. EVM analysis will be conducted using the Agency cost and schedule analysis tools and user guides found on the Resource Page. The EVM Analyst is identified in the PSP or SPSP.
- **a. Obtain and Evaluate Contractor EVM Data Submission.** DCMA will use Defense Cost and Resource Center (DCARC) EVM Central Repository (EVM-CR) to access official contractor submissions for review and analysis unless the contract does not specify the use of EVM-CR, in which case DCMA will receive the data directly from the contractor. Any EVM

data obtained from the contractor, which is not stored in EVM-CR, must be uploaded to the Prime contract folder in the Electronic Document and Records Management (eDRMS). DCMA EVM Analysts must register in DCARC as a "Reviewer" in order to access and provide validation recommendations to the program office during the official review timeframe. See the appropriate section of the Program Support Analysis and Reporting User Guide found on the Resource Page for instructions on how to register with DCARC.

(1) Every month the EVM Analyst will download EVM-CR or contractor provided Integrated Program Management Report (IPMR) or Contract Performance Report (CPR)/Integrated Master Schedule (IMS) data and import the data into the appropriate DCMA EVM analysis software. The EVM Analyst must ensure the data in the submitted IPMR or CPR/IMS is complete, Data Item Description (DID) compliant, consistent, and reliable (Table 1). The minimum data integrity metrics and tests for evaluating cost and schedule data are described in Appendix 3A.

Name
CPR/IMS DIDs
Format 1 - Work Breakdown Structure
Format 2 - Organizational Categories
Format 3 - Baseline
Format 4 - Staffing
Format 5 - Explanations and Problem Analyses
Format 6 - Integrated Master Schedule
Format 7 - Electronic History and Forecast File

CPR/IMS DIDs
IPMR DID

DI-MGMT-81466A

DI-MGMT-81861A

DI-MGMT-81861A

Table 1. DID Correlation

- (2) For submissions in the EVM-CR, no later than (NLT) 10 business days after contractor submission, the EVM Analysts must report any discrepancies and provide a recommendation to the Program Office through the DCARC system as to whether the data is complete and DID compliant. (See the appropriate section of the Program Support Analysis and Reporting User Guide found on the Resource Page.) For other prime contractor submissions not in the EVM-CR, the discrepancies will be directly reported to the program office through the PI. The CMO may submit a contractual noncompliance or "other Contract Management" documentation CAR pertaining to the missing or late EVM CDRL deliverable or for incorrect CDRL data if the program office rejects the submission. This is not a system review and suspect data that may indicate areas of concern with the EVM system will be forwarded to the EVMS Center for review and determination of appropriate actions in accordance with DCMA-INST 210. The EVM Analyst must not create any EVMS CARs.
- **b. Determining Contract Risks or Issues.** As part of the monthly analysis, the EVM Analyst will evaluate variances and determine potential risks or issues.
- (1) For those Work Breakdown Structure (WBS) elements with effort remaining, the EVM Analyst must perform Cost Variance (CV), Schedule Variance (SV), and Variance at Completion (VAC) analysis at the lowest reporting level in order to determine the WBS elements that significantly contribute to the overall contract variances. This analysis is typically performed with cumulative performance data; however, variance analysis employing current

period data may also be useful in identifying emerging trends that indicate current issues or may signal potential risks.

- (2) To determine the list of WBS elements, the EVM Analyst must select incomplete WBS elements that may impact the contract and potential need for surveillance. The information for these WBS elements will be provided to the PST or SPST functional specialists during the review of the Program Risk table IAW DCMA-MAN 3101-01.
- (3) The PST or SPST functional specialist must work with the other PST or SPST members to provide to the EVM Analyst through eFITs (paragraph 3.2):
  - (a) An independent root cause.
  - (b) Feasibility of CAPs.
  - (c) Estimated recoverability of the variances.
  - (d) Any additional cost or schedule adjustments (impacts) to the contractor's values.
- **c. DCMA Cost and Schedule Estimates.** Independent DCMA Cost and Schedule Estimates are of paramount importance to the acquisition community. See Appendix 3B for additional details.
- (1) Determine the Need for Revised Estimates. As part of the monthly analysis, the EVM Analyst will make a determination as to whether DCMA Estimate at Completion (EAC $_{DCMA}$ ) or Estimated Completion Date (ECD $_{DCMA}$ ) needs to be reviewed outside of the quarterly generation process. If any of the following conditions have occurred since the last time these values were calculated, or if a Memorandum of Agreement (MOA) with the Program Office requires one, perform an out-of-cycle calculation of the EAC $_{DCMA}$ , DCMA Variance at Completion (VAC $_{DCMA}$ ), or ECD $_{DCMA}$  and days of schedule slippage and update if necessary:
  - (a) Over Target Baseline (OTB) or Over Target Schedule (OTS).
- (b) Notable contractor Estimate at Completion (EAC<sub>Ktr</sub>) change without a corresponding Total Allocated Budget (TAB) change.
  - (c) Missed previously reported milestone or contractually required event.
- (2) Quarterly Schedule Analysis. On a quarterly basis, in preparation for the PAR submission, the EVM Analyst must provide to the PI DCMA's assessment of the contract's schedule performance. This analysis uses the EVM and duration-based schedule metrics to evaluate the contract schedule and forecast any potential schedule delays to the contract or program. Contributing factors affecting the contract milestone completion dates include: critical path, driving paths, lag, float, margin use/consumption, subcontractors, rework, test failures, schedule delays, contract mods, Over Target Schedule (OTS), and single point adjustments.

- (a) Schedule Performance. The EVM Analyst must analyze the Baseline Execution Index (BEI) and missed task trends, correlate the tasks to the PST Functional provided root causes, identify any corrective actions, and evaluate the impact on the schedule.
- (b) ECD<sub>DCMA</sub>. Prior to determining the ECD<sub>DCMA</sub>, the EVM Analyst must apply the functional specialists' and SPST EVM Analysts' schedule adjustments to the appropriate tasks in the IMS. These schedule adjustments will account for known or forecasted slippages based on functional surveillance or SPST EVM analysis. After the EVM Analyst has made all known adjustments, he or she will use the Agency schedule analysis tool or the constraint method to determine the DCMA independent critical path and the ECD<sub>DCMA</sub> for each milestone or contractual required events. After incorporating all functional schedule adjustments, the EVM Analyst must upload a copy of the DCMA independent critical path and contractor's critical path to the "Program Documents" tab in the program's PST Collaboration Site.
- (c) Contractually Required Events/Milestone Analysis. Include analysis of the DCMA projected completion dates and trends of contractually required events and milestones. Determine what WBS elements or tasks are driving DCMA's projected completion date, any root causes, the contractor's proposed mitigations, and CAPs. Further explain the differences between DCMA estimates and the contractor's values.
- (3) Quarterly Cost Analysis. On a quarterly basis, in preparation for the PAR submission, the EVM Analyst must submit DCMA's assessment of the contract's cost performance to the PST Collaboration Site. Cost analysis evaluates the impact to contract performance based on numerous factors (e.g., Management Reserve (MR) use, subcontractors, rework, test failures, schedule delays, contract mods, labor rates, material costs, OTB, single point adjustments) and forecasts any potential cost overruns to the contract or program. The provided assessment is an independent evaluation of the contract's performance and includes insight from DCMA functional specialists.
- (a) EAC<sub>DCMA</sub>. The EAC<sub>DCMA</sub> is an analysis of WBS elements at the lowest reporting level and the risk/opportunities that may impact implementation of contract level requirements. This analysis involves determining the reasonableness of the WBS level EAC with information gained from PST/SPST functional surveillance and SPST EVM analysis inputs. In addition to the WBS level analysis, the contract level analysis will account for factors such as estimates of known or anticipated risk areas, planned risk reductions, or cost containment measures. Challenge, when appropriate, the contractor's analysis and explanations. Perform independent analyses and surveillance to support these challenges.
- 1. Lowest WBS Level EAC<sub>DCMA</sub>. Lowest WBS level EAC<sub>DCMA</sub> is composed of two parts: the EVM formula based performance and the PST/SPST members' cost adjustments based on surveillance. The EVM Analyst must select the appropriate EAC methodology for each WBS element (e.g., cumulative Cost Performance Index (CPI<sub>cum</sub>), 3 period average CPI (CPI<sub>3 period average</sub>), composite, linear regression, manual). The methodology selected should only change at significant transition points of that element and not vary from report period to report period (Appendix 3B). The EVM Analyst will then adjust the formula based WBS element EAC with the PST/SPST members' cost adjustments. For prime contractor WBS elements that are delegated to SPST EVM Analysts, the PST EVM Analyst assigned to the prime contract must

incorporate the SPST EVM Analysts' EAC<sub>DCMA</sub> for the respective WBS elements. When a subcontractor with a fixed price type contract is represented as an element on the prime contractor's WBS, the WBS level EAC estimate for the subcontractor cannot exceed the subcontract ceiling price.

- 2. Lowest WBS Level EAC<sub>DCMA</sub> Realism. The EVM Analyst must evaluate the confidence of the EAC by comparing the WBS level VAC to the existing cumulative Cost Variance (CV<sub>CUM</sub>), comparing the CPI<sub>CUM</sub> to the "To Complete Performance Index" (TCPI<sub>EAC</sub>), and comparing the WBS level EAC<sub>DCMA</sub> to the optimistic and pessimistic range of EACs. This will provide warning indicators of any WBS level EAC<sub>DCMA</sub> not in alignment with past performance trends and significant differences should be explained and noted at the WBS level before generating the contract level EAC<sub>DCMA</sub>.
- $\underline{3}$ . Contract Level EAC<sub>DCMA</sub>. The EVM Analyst must generate the contract level EAC<sub>DCMA</sub> by summing the lower WBS level EAC<sub>DCMA</sub> values and adding the expected MR usage and risk adjustments. Since MR does not form part of the PMB, the EVM Analyst must add the expected MR usage and risk adjustments not included in the WBS level EAC<sub>DCMA</sub>.
- $\underline{a}$ . Risk Items. Integrate functional specialist dollarized cost impact with the EAC<sub>DCMA</sub> for the cost, schedule, and technical risk items the functional specialist is monitoring.
- <u>b.</u> MR Usage. Use the contractor provided MR log to compare the contract percent complete to the percentage of MR usage. Determine if the rate of MR usage is sufficient to complete the contract when compared to known risks. Even if the cost of the known risks is less than the MR, the MR usage might still suggest using all of the MR to determine the contract level EAC<sub>DCMA</sub> value. Rationale and methodology for MR usage amount should be documented.
- $\underline{c}$ . Contract level EAC<sub>DCMA</sub> Realism. Evaluate the confidence of the contract level EAC<sub>DCMA</sub> using the same three tests as the WBS level realism check in paragraph 3.5.c.(3).(a).2. If the contract level EAC<sub>DCMA</sub> realism is outside the established thresholds, then verify the WBS level calculations and adjustments. If the deviation is supportable by inputs of known issues or a recovery, then include the explanation to substantiate the EAC<sub>DCMA</sub>. Since the EAC<sub>DCMA</sub> directly affects the program assessment and is one factor that the ACO uses in determining the loss ratio and reductions in progress payments on applicable contracts, it is important to be realistic.
- (b)  $VAC_{DCMA}$  Analysis. The  $VAC_{DCMA}$  identifies either a projected overrun or underrun. The EVM Analyst calculates the  $VAC_{DCMA}$  at the WBS and contract level.
- $\underline{1}$ . WBS Level VAC<sub>DCMA</sub>. The WBS level VAC<sub>DCMA</sub> is the difference between the WBS level Budget at Completion (BAC) and the respective EAC<sub>DCMA</sub>. This determines the performance drivers influencing the contract level VAC<sub>DCMA</sub>. When reporting the results in the "EVM Analysis" tab, summarize completed tasks into a summary line and focus on the top current and future drivers.
- $\underline{2}$ . Contract level VAC<sub>DCMA</sub>. The contract level VAC<sub>DCMA</sub> is the difference between the TAB and contract level EAC<sub>DCMA</sub>. The VAC<sub>DCMA</sub> provides independent and predictive insight into how much DCMA believes the contract will overrun or underrun on cost.

If an OTB has occurred, also track the percentage of DCMA Variance at Completion (VAC<sub>DCMA</sub>%) to the original contract budget base.

- (c) EAC<sub>DCMA</sub> and VAC<sub>DCMA</sub> Comparative Analysis to the Contractor Values. The EVM Analyst must address the key reasons for significant differences between the EAC<sub>DCMA</sub> and the contractor's EAC (EAC<sub>Ktr</sub>) value.
- **d. Providing EVM Analysis Insights.** Using the program's PST Collaboration Site, the EVM Analyst must enter the analysis results into the "EVM Analysis" tab for the specific program, contract or CLIN, and report month. This will provide the PI the required EVM information defined in Appendix 4B. The DCMA 14 point assessment is no longer a requirement but may be performed and provided per the MOA. In this case, the 14 point assessment will be loaded to the PST Collaboration Site "Program Documents" tab.
- **3.6. PRIME CONTROL OF SUBCONTRACTOR ASSESSMENT.** The PCSA is a DCMA assessment of the prime contractor's compliance to established subcontractor management processes, procedures, and controls for each specific program. Do not aggregate assessments above the program level.
- **a. PCSA Development.** Information supporting the PCSA table in the PAR must be provided to the PI by the PST member identified in the PSP. The PCSA rating must be determined using the PCSA tab within the PST Collaboration Site. Instructions can be found in the appropriate section of the Program Support Analysis and Reporting User Guide found on the Resource Page.
- **b. PCSA Ratings.** Ratings must be verified and updated using multifunctional risk-based surveillance execution results, audit findings, and input from external sources as applicable.
- **c. PCSA Ratings Determinations.** PCSA rating determinations other than Confident require:
- (1) Narrative of what the prime contractor specifically failed to do to mitigate a subcontractor performance issue.
- (2) Narrative of what the prime contractor's corrective and preventive actions for resolving subcontractor management issues (e.g., CAR, CAP).
- (3) Narrative of DCMA action and assessment of potential impact on the program. Insert the narratives in the Notes section of the PCSA tab for use by the PI in completing the PCSA section of the PAR.
- **d. PCSA Results.** PCSA results are provided to the PI at least quarterly in accordance with the PSP.
- **3.7. SUPPLIERS DRIVING THE RATINGS.** The PI or SPI will use functional inputs, CAR eTool and Delegation eTool to populate the table.

- **3.8. SPI SUPPORT PAR.** The SPI must develop a Support PAR for each Major Program effort they have been delegated to support. The PAR template is utilized for this purpose; however, the applicable content of the reporting is as specified in the delegation from their next higher SPI or PI.
- a. SPI Drafts Support PAR in Collaboration with SPST Functional Input. The SPI must familiarize themselves with all of the inputs provided by their SPST members in their program's PST Collaboration Site. The content for these inputs will be determined by the accepted Letter of Delegation (LOD) and may include Support PARs and other types of reports from sub-tier CMOs, eFITs, EVM information, Production Supportability Tables, CBS, and others.
- (1) SPI Discussions to Reach Consensus on Predictive Analysis. It is imperative that the SPI have discussions with their SPST members to reach a consensus of the impact the various inputs have on our predictive assessments. The Support PAR or alternative report must include summarized information derived from functional input that contributes to the rating assessment conclusions. This summary must be written by the SPI using the SPST members' input.
- (2) SPI Use of the PAR Template. The SPI must use the PAR Template found on the Resource Page to create the Support PAR unless an alternative format was delegated. The Support PAR, at a minimum, will contain the content specified in the applicable LOD. If the PAR Template is used the SPI must label all non-applicable Support PAR elements as "N/A." Final Support PARs must be submitted by the due date specified in the LOD.
- **b. SPI Initiates CMO Review Process (Optional).** A CMO review process is not required. If the CMO may add a review process the SPI must review and consider all comments provided by any CMO reviewers. The SPI must update the draft PAR to include those comments as needed. The review must not interfere with the PAR submission timelines identified by the PI.
- **c. Report Submitted.** The SPI must load the Support PAR or alternate report into the program's "Program Documents" tab in the program's PST Collaboration Site.

#### **APPENDIX 3A: CONTRACT DATA EVALUATION METRICS**

- **3A.1. COST DATA INTEGRITY INDICATORS.** CPR/IPMR Data Integrity Indicators are metrics designed to provide confidence in the quality of the data being reviewed instead of providing insight into the performance of a contract. The EVM Analyst should report any WBS elements with one of the following conditions being tested for by these metrics.
- **a.** BCWS<sub>CUM</sub> > BAC. The Budgeted Cost for Work Scheduled (BCWS) is the contract budget time-phased over the period of performance. The summation of BCWS for all reporting periods should equal the BAC. In other words, BCWS summation for all reporting periods (BCWS<sub>CUM</sub>) should equal BAC on the month the contract is planned to complete. Both of these values can be found on the IPMR/CPR Format 1. Due to this relationship, the value of BCWS<sub>CUM</sub> should never exceed BAC. Errors may exist in EVM data resulting in this condition, thereby making it necessary to perform this metric. Compare the value of BCWS<sub>CUM</sub> to the value of BAC; if BCWS<sub>CUM</sub> is greater than BAC, consider this an error in the EVM data. There is no plausible explanation. There may be no issue if the value of BCWS<sub>CUM</sub> is less than BAC.
- **b. BCWP**<sub>CUM</sub> > **BAC.** The Budgeted Cost for Work Performed (BCWP) is the amount of BCWS earned by the completion of work to date. Like the BCWS<sub>CUM</sub>, the Budgeted Cost for Work Performed, cumulative (BCWP<sub>CUM</sub>), cannot exceed the value of BAC. The contract is considered complete when BCWP<sub>CUM</sub> equals BAC. Compare the value of BCWP<sub>CUM</sub> to BAC. If BCWP<sub>CUM</sub> is greater, then this is an error, otherwise there is no issue.
- c. ACWP with No BAC. The Actual Cost of Work Performed (ACWP) is the total dollars spent on labor, material, subcontracts, and other direct costs in the performance of the contract statement of work (SOW). These costs are controlled by the accounting general ledger and should reconcile between the accounting system and EVMS. Work should only be performed if there is a clear contractual requirement. The BAC is required to be traceable to work requirements in the contract SOW. If work is performed and the ACWP incurred without applicable BAC, there may be a misalignment between the work and the requirements of the contract. To test for this condition, simply review the IPMR/CPR Format 1 data for WBS elements containing any instance of current or cumulative ACWP but no BAC. If there are elements that meet these criteria, the contractor should provide justification. If this did not occur, consider this an error.
- **d. Negative BAC or EAC.** BAC is the total budget assigned to complete the work defined within the contract. Likewise, EAC is the Estimate at Completion of the work. A negative total budget is not logical. To test for this condition simply examine the IPMR/CPR Format 1 data for a BAC or EAC less than zero. This test should be performed at the reported WBS levels as well as the total program level. A BAC or EAC less than zero should be considered an error.
- **e.** Negative BCWS<sub>CUM</sub> or Negative BCWS<sub>CUR</sub>. The BCWS is the time-phased contract budget. The summation of BCWS for all reporting periods equals the total contract BAC. When the initial baseline is established there should be no instances of negative BCWS. However, as work progresses there may be legitimate reasons for re-planning of budget. Changes to the baseline may result in a negative value for budget in the current reporting period (BCWS<sub>CUR</sub>). It

is not possible to re-plan more budget than has already been time-phased to date. Therefore, there should not be an instance of negative BCWS<sub>CUM</sub>. To test for this condition simply examine the current and cumulative sections of the IPMR/CPR Format 1 for BCWS<sub>CUM</sub> or BCWS<sub>CUR</sub> less than zero.

- **f. Negative BCWP**<sub>CUM</sub> **or Negative BCWP**<sub>CUR</sub>**.** There may be negative BCWP due to wrong consideration for "Earned Value." To test for this condition, simply examine the current and cumulative sections of the IPMR/CPR Format 1 for BCWP<sub>CUM</sub> or BCWP<sub>CUR</sub> less than zero.
- **g. BCWP with No ACWP.** Since work or materials must be paid for, it is not possible to earn BCWP without incurring ACWP. This condition may occur for elements using the Level of Effort (LOE) Earned Value Technique (EVT). In this case, it would signify the support work that was planned to occur is not occurring due to some delay. This metric can be calculated using the IPMR/CPR Format 1 data. Inspect the elements on the report for any instance of current or cumulative BCWP with a corresponding current or cumulative ACWP equal to zero.
- **h. Completed Work with Estimate To Complete (ETC).** Since work is considered complete when an element's BCWP<sub>CUM</sub> equals the element's BAC, the ETC is the to complete portion of the EAC. The ETC should be zero if the work is complete, as there should be no projected future cost left to incur. Look for completed elements (BCWP<sub>CUM</sub> = BAC) with an ETC other than zero. This condition may exist if labor or material invoices are lagging behind and haven't been paid yet. Be sure to adjust your EAC forecast to accommodate this error and refer the issue to the EVMS Center.
- i. Incomplete Work without ETC. If work has yet to be completed, there should be a forecast of the remaining costs to be incurred. Determine if there are any elements that are incomplete (BCWP $_{\text{CUM}}$  < BAC) and contain an ETC of zero. If this condition exists, consider it an error.
- **j. ACWP on Completed Work.** There may be valid reasons to incur cost (ACWP) following the completion of work (BCWP<sub>CUM</sub> = BAC). However, this should not be considered the norm. Review the IPMR/CPR Format 1 for the following:
  - $BCWP_{CUM} = BAC$
  - $BCWP_{CUR} = 0$
  - ACWP<sub>CUR</sub>  $\neq 0$

Keep in mind there may be costs incurred in the month the element of work is complete. That is why it's necessary to check for BCWP<sub>CUR</sub>. This insures the work was completed in a prior period and if ACWP<sub>CUR</sub> returns a value other than zero the metric is flagged.

**k. BCWP with No BCWS.** Since all budgeted work performed should have been scheduled, occurrences of BCWP without BCWS should be commensurate with early starts in the IMS. The values do not have to be equal since actual work will rarely match the baseline work during project execution, but the values will equal at project completion. This metric can be calculated using the IPMR/CPR Format 1 data. Inspect the elements on the report for any instance of current or cumulative BCWP with a corresponding current or cumulative BCWS equal to zero.

- **1. ACWP**<sub>CUM</sub> > **EAC.** The EAC consists of two components, the actual costs incurred to date (ACWP<sub>CUM</sub>) and the estimate of future costs to be incurred or the ETC. The ACWP<sub>CUM</sub> can only be greater than EAC if the ETC is negative or extra cost incurred/recorded due to correction of accounting, management, or ledger errors. There may be limited cases that would require a negative ETC. Using the IPMR/CPR Format 1, examine the elements for any condition of ACWP<sub>CUM</sub> greater than EAC. If this condition exists, adjust your EAC forecast to accommodate the condition and refer the issue to the EVMS Center.
- **3A.2. SCHEDULE DATA INTEGRITY INDICATORS.** To begin the analysis, exclude Completed tasks, LOE tasks, Subprojects (called Summary tasks in MS Project), and Milestones. These metrics provide the analyst with a framework for asking educated questions and in support of forecasting schedule completion and estimates at complete. Identified concerns may be issues of compliance and will be referred to the EVMS Center for follow-up.
- **a. Logic.** This metric identifies incomplete tasks with missing logic links. It helps identify how well or poorly the schedule is linked together. Any incomplete task that is missing a predecessor and/or a successor is included in this metric.
- **b. Hard Constraints.** This is a count of incomplete tasks with hard constraints in use. Using hard constraints (e.g.; Must-Finish-On (MFO), Must-Start-On (MSO), Start-No-Later-Than (SNLT), and Finish-No-Later-Than (FNLT)) may prevent tasks from moving with their dependencies and, therefore, prevent the schedule from being logic-driven. Soft constraints such as As-Soon-As-Possible (ASAP), Start-No-Earlier-Than (SNET), and Finish-No-Earlier-Than (FNET) enable the schedule to be logic-driven.
- **c. Invalid Dates.** This area of analysis includes planned tasks that have a forecast start/finish date prior to the IMS status date, completed tasks that have actual start/finish dates beyond the IMS status date, incorrectly statused finish dates when a task is not complete, and tasks that have riding start dates. There should not be any invalid dates in the schedule.
- **d.** Critical Path Test. The purpose is to test the integrity of the overall network logic and, in particular, the critical path. If the contract completion date (or other milestone) is not delayed in proportion (assuming zero float) to the amount of intentional slip that is introduced into the schedule as part of this test, then there is broken logic somewhere in the network. Broken logic is the result of missing predecessors and/or successors on tasks where they are needed. The IMS passes the Critical Path Test if the project completion date (or other task/milestone) show a negative total float number or a revised Early Finish date that is in proportion (assuming zero float) to the amount of intentional slip applied.
- **e. Milestones with Duration.** Includes milestones that are planned or in-progress whose duration is greater than zero. Per the Earned Value Management System Interpretation Guide (EVMSIG), milestone tasks should not have a duration.
- **f. Missing WBS.** Activities without WBS values indicate poor planning and cause problems in reporting information about that task. This metric includes only normal activities and milestones that are planned, in-progress, or complete.

# APPENDIX 3B: DCMA COST AND SCHEDULE ESTIMATES AT COMPLETION

#### 3B.1. COST.

**a.** EAC. The EAC is the projection of the final cost of the contract/program. The process starts with how much has already been expended (ACWP). It follows with how much work remains, Budgeted Cost of Work Remaining (BCWR), and how much is needed to finish the work as related to the amount of expenditures or costs incurred or recorded ("Actuals"). This allows that EAC is made up of "actuals" and the Estimated (cost of the work left) To Complete (ETC).

where PF could be Cost Performance Index (CPI), Schedule Performance Index (SPI<sub>x</sub>), CPI x SPI<sub>x</sub>, .x(CPI) +(1-.x)(SPI<sub>x</sub>) given .x:  $0 < .x \le 1.0$  as determined with elaborated rationale (Table 2). Completion of an OTB/OTS may impact the utility of any performance factor and the impacts of the changes should be understood as part of the EAC development.

**Table 2. Best Predictive EAC Performance Factors by Contract Completion Status** 

		Percent Complete			
EAC Performance Factor (PF)		Early: 0%-40%	Middle: 20%-80%	Late: 60%-100%	Comment
CPI	Cumulative	X	X	X	Assumes the contractor will operate at the same efficiency for remainder of contract, typically forecasts the lowest possible EAC
	3-Period <sup>b</sup> Avg	X	X	X	Weights current performance more heavily than
	6-Period <sup>b</sup> Avg		X	X	cumulative past performance
	12-Period <sup>b</sup> Avg		X	X	
CPI x SPI <sub>x</sub>	Cumulative	X	X		Usually produces the highest EAC
	6-Period <sup>b</sup> Avg		X	X	A variation of this formula (CPI <sub>6</sub> x SPI <sub>6</sub> ), also proven accurate
SPI <sub>CUM</sub>	Cumulative	X			Assumes schedule will affect cost also but is more accurate early in the contract than later
Regression		X			Using CPI that decreases within 10% of its stable value can be a good predictor of final costs and should be studied further
Weighted		X		X	Weights cost and schedule based on .x(CPI)+(1x)(SPI <sub>CUM</sub> ); statistically the most accurate especially when using 50% CPI +50% SPI <sub>CUM</sub> <sup>a</sup>

<sup>&</sup>lt;sup>a</sup>According to DOD comments based on the work of David S. Christensen.

(1) WBS Level EAC. Performed at the WBS reporting level and rolled up to the contract level. This EAC includes ACWP and ETC. ETC comprises the rollup of all the

<sup>&</sup>lt;sup>b</sup>Changed Month to Period.

remaining work, risks and opportunities at WBS reporting level, and risk adjustments that can be mapped to a specific WBS element.

- (a) Performance Factor. Select the Efficiency Factor that best describes the contract and WBS element being evaluated using Table 2. On large programs, not all contracts or even WBS elements will utilize the same performance factor method to accurately estimate its completion value. Although the method may differ by contract or WBS element, the methods should remain consistent from reporting period to reporting period.
- (b) Risk Adjustments. The CPR/IPMR provides the contractors' most likely EAC (EAC<sub>Ktr</sub>) that accounts for some program/contract risk factors. It is important to review the program/contract risk registry and determine if the risks included by the contractor in their most likely EAC are reasonable. These risks may present a consequence in terms of either cost or schedule. Technical risks may impact schedule and cost performances and initiate cost and schedule risks. Risks, contingencies, and mitigation plans should be included in the schedule and thereby in the cost system. Risks and issues not accounted for by the contractor or adequately addressed through the performance factor should be considered. Participation in risk management meetings between the contractor and the program office will facilitate this understanding.
- (c) Realism. The determination of estimate of work to complete (ETC) is directly proportional to the cost of work remaining (BCWR). Similar to CPI, the remaining work performance index or To Complete Performance Index (TCPI) is the ratio of work remaining (BCWR) and future cost of work remaining (ETC). Evaluating this ratio can help determine which WBS level EACs (contractor or DCMA) are not in line with past performance and need further review to verify that DCMA is provided a reasonable estimate in the calculation based on contractors' historical CPI. A mathematical difference between 0.05 and 0.1 is used as an early warning indicator that the forecasted completion cost could possibly become unrealistic, stale, or was not updated recently. It is important to remember that this is only a guide for focusing analysis.
  - (2) Contract Level. Determine the EAC<sub>DCMA</sub> at the contract level.
- (a) WBS Level Rollup. To determine the EAC<sub>DCMA</sub> for the contract, the WBS level EACs must be summed to the Contract level. The reason this is performed at the lower level first is to prevent skewing the data by averaging out performances of individual WBS elements by conducting the performance factor determination at only the contract level.
- (b) Risks and Opportunity Adjustments. Any PST provided or known risk and opportunity impacts adjustments that were not included at the WBS level will be applied at the contract level to adjust the  $EAC_{DCMA}$ .
- (c) MR Consumption. MR Consumption provides insight into how quickly the MR is being depleted. Approved MR requests result in adjustments to the baseline, in terms of both time, and the allocation or loading of additional budget into the PMB or BAC. Then, we may view increase or decrease on the BAC or PMB value. MR is increased or decreased depending on the type of modifications, task revisions, reprograming, replanning, rate changes, and other

factors. MR consumption is measured by dividing the program percent complete (%comp) by the percentage of MR (%MR) used to date.

- 1. The contractor is required to track debits and credits to MR over time. These changes should be reflected in the IPMR Format 5. It is important to account for all the MR debits and credits when calculating this metric. It is not simply the current value of MR divided by the original value of MR. In fact, if there are significant credits to MR since program inception, the current MR value might actually be greater than the original value, even if there was a debit of some MR.
- $\underline{2}$ . The resulting MR consumption value should be equal to  $1.0 \pm 0.1$ . A value greater than 1.0 indicates that the MR is possibly being too conservatively withheld, while a value less than 1.0 indicates that there may not be enough MR to support the program through completion. If the rate of MR usage is high, then it may indicate the original PMB did not contain the necessary budget for accomplishing the contract SOW. Graphical Representation depicting MR Consumption of both cases are indicated in Figure 1. It is important to monitor and trend MR use over time when performing predictive analysis. Determine whether all the MR is to be used or not while making decision for the EAC<sub>DCMA</sub>.

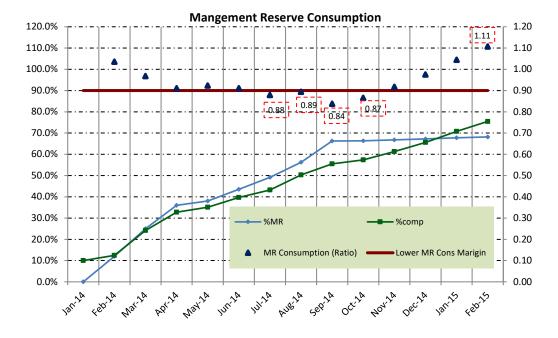


Figure 1. Management Reserve Consumption

(d) Realism. Calculate the EAC Realism of the contract level EAC for both the DCMA's and the contractor's EAC. At the contract level, DCMA uses TAB instead of BAC in the TCPI formula since historical trends show that most programs consume all the MR by the end of the contract. The EAC realism value for both the Contractor and DCMA will be reported to the PI as part of the EVM Analyst input.

**b. VAC.** VAC<sub>DCMA</sub> is calculated at the contract level and represents the difference between the TAB or Contract Budget Base and the estimated final cost. VAC is also measured in percentage (%) and known as VAC percentage (VAC%). Why does DCMA use TAB instead of BAC? At the contract level, as MR is used, it becomes part of the PMB, increasing the BAC. Since most major programs historically use all their MR, the BAC at the completion of the contract would equal the TAB. Given this, to be predictive, DCMA uses TAB to begin with to reduce VAC fluctuations caused from applying MR. If a VAC is being calculated at the WBS level, then BAC is still used as there are no WBS level TAB values.

$$VAC_{DCMA}\% = \frac{VAC_{DCMA}}{TAB}*100\%$$
 where, 
$$VAC_{DCMA} = TAB - EAC$$

**c.** Comparative Analysis to Contractor Values. Explain DCMA's methodology used to generate the EAC value and explain significant differences between the contractor's EAC and DCMA's.

#### 3B.2. SCHEDULE.

- **a. Status.** A variety of variables can be used to illustrate the current status of the schedule (e.g.; Status Date, ECD, Percent Complete, Activity Counts, and Remaining Duration).
- **b. Baseline Execution Index.** The BEI metric is an IMS-based metric that calculates the efficiency with which tasks have been accomplished when measured against the baseline tasks at a Status Date. BEI compares the cumulative number of tasks completed to the cumulative number of tasks with a baseline finish date on or before the status date of the reporting period. BEI does not provide insight into tasks completed early or late (before or after the baseline finish date), as long as the task was completed prior to the status date of the reporting period. Missed Task metrics provide further insight into on-time performance.
- (1) If the contractor completes more tasks than planned, then the BEI will be higher than 1.00, reflecting a higher task throughput than planned. A BEI less than 0.95 should be considered a flag and requires additional investigation. The PST needs to investigate areas of interest to include but are not limited to:
  - What is causing the work to not be performed on-time?
  - Are the missed tasks on the critical path?
  - Is there an impact to cost? If so, then what is the projected impact?
  - Is there a monthly trend?
  - What is the contractor doing to remedy the situation?
  - What is DCMA doing to track performance?
- (2) A consistently downward trending BEI and increasing missed task percentage can be associated with variance trends. If these trends continue over the long run, the schedule may become unreliable.

- **c. Missed Tasks.** The BEI metric is an IMS-based metric that calculates the efficiency with which tasks have been accomplished when measured against the baseline tasks at a Status Date. Missed tasks are incomplete tasks with a baseline finish date that is before the status date. Examination of a consistently high percentage of missed tasks, regarding the nature of the late completion dates, is necessary. Use the following guidelines to make a proper determination:
- (1) A high percentage of missed tasks could result from a series of tasks that on average only a few days late or conversely months late. This is a clue when developing an independent forecast date. For example, if the contractor is 76 days late on average in completing tasks, then the analyst can use this information as a partial basis for forecasting that the contractor will be 76 days late to program completion.
- (2) If the missed tasks are always non-critical but the critical path tasks are consistently completed on time, the high missed task percentage may not be a major concern.
- (3) If the missed tasks are always on the critical path, then the low hit task percentage is a major concern and should be tracked as a risk.
- (4) A consistently high missed task percentage and a consistently good BEI could mean the tasks are only slightly late on average and the actual finishes for those late tasks may never impact the BEI beyond the current period.
- **d.** Critical Path and ECD<sub>DCMA</sub>. The  $ECD_{DCMA}$  is predictive insight to project completion. The analyst must ensure that the  $ECD_{DCMA}$  is independent, based on in-depth critical path analysis, evaluates past performance, leverages multifunctional surveillance results, and uses available metrics and tools to provide measureable data. In order to perform this analysis, an analyst first identifies the critical path.
- (1) Critical Path. The program critical path is the sequence of discrete tasks/activities in the network that has the longest total duration through the contract. Discrete tasks/activities along the critical path have the least amount of float/slack. Be wary of contractor methodology that states the critical path is comprised of all the tasks with zero or less total float. This is not the same as the longest total duration with the least amount of total float (i.e., a single number, not a range of numerical values). DCMA will utilize the contract submitted data to represent the contractor's values, but based on the PST Member inputs, may have to predict DCMA forecasted completion dates that are different than the contractor's and may result in a different critical path.
- (2) Event and Milestone ECD. The ECD is measured at each of the program milestones, contractually required events, and the contract finish date. As a contract can have a large number of milestones and events, it is recommended for reporting purposes to focus on those that exist either on the critical path or are of significant interest to the customer. The contractor's work schedule determines how many days equals a month. For example, a contractor that does not work weekends has approximately 22 work days in a calendar month. Measurement can also be done using calendar days. The net effect of all the task slippages on the critical path and therefore the contract will indicate by how much the ECD has deviated from the Baseline.
- (a) Baseline Finish Date. The baseline finish date is the scheduled completion date found in the "Baseline Finish" field of each task or milestone in the IMS.

- (b)  $ECD_{Ktr}$ . The ECD is defined as the date found in the "Forecast Finish" field of a properly networked IMS (which is typically the same as the date found in the "Early Finish" field) of each milestone or task.
- (c)  $ECD_{DCMA}$ . The EVM Analyst will report the to the PI the most recently completed milestone or contractually required event, and the next milestone or event, the contract finish date and any other tasks, milestones or events that illustrate DCMA's projection of the contractors progress to the schedule.
- (3) Comparative Analysis to Contractor Values. Provide the PI with an explanation of any significant difference between the Contractor and DCMA estimates as well as an explanation of the root cause of any slippages.

#### **SECTION 4: PROGRAM REPORTING**

#### 4.1. QUARTERLY PAR.

Group A

Group B

Group C

a. PI Drafts PAR. DCMA PARs provide our acquisition partners with a comprehensive and unbiased assessment of the health of the program. PIs must adhere to the contents of the Program Support Analysis and Reporting User Guide found on the Resource Page in the creation of their PAR. PAR submissions must be submitted quarterly according to the schedule for their assigned grouping (i.e., A, B, or C) in Table 3. Program group assignments can be found in the IWMS PAR tool. The due date for PAR approval is NLT the 6th business day of the month for the group to which they are assigned. It is imperative that all parties responsible for PAR development and approval comply with the PAR Group Timeline (Figure 2) to ensure comments are received prior to the PAR approval submission as well as for timely PAR distribution for OSD review.

Feb May Nov Aug Mar Jun Sep Dec Jul Oct

**Table 3. PAR Report Months** 

Figure 2. PAR Group Timelin	Figure 2	2. PAR	Group	Timeline
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Apr

ACTIVITY		JAN/JUL	FEB/AUG	MAR/SEP	APR/OCT	MAY/NOV	JUN/DEC
PI Develops PAR	Until Last Business Day Prior to Reporting Month	A	В	C	A	В	C
FLSR, Group Director, Deputy Director, Operational Unit, PM&BI, & PMO Review Draft PAR	Last Business Day - 3rd Business Day	Å	B		A	В	C
PI Submits PAR	On 4th Business Day	С	A	В	c	A	В
CMDR/DIR Approves PAR	4th - 6th Business Day	C	A	В	c	/ A	В
CMO Submits DAES Assessment in DAMIR	7th Business Day	С	A	В	c /	A	В
Agency DAES Assessment Released	8th Business Day	С	A	Ψ B	C C	A	В

(1) PI Reviews Functional and SPI Inputs. PIs must familiarize themselves with all of the inputs provided by their PST members and SPIs in the program's PST Collaboration Site. Inputs may include Support PARs, reports from sub-tier CMOs, eFITs, EVM analysis, and Production Supportability Tables.

Jan

- (2) PI Collaborates with PST Functional Members and SPIs. It is imperative that the PI have discussions with their PST functional members, SPIs, and applicable ACOs, DACOs or CACOs. This serves to better appreciate the inputs provided and to reach consensus on the impact of the various inputs have on DCMA's predictive assessments pertaining to program cost and schedule.
- (3) PI Drafts PAR. In order to assure the pre-populated PAR information is correct, the PI must assure the Program Information is current. The CPA, PA, and MA synopses provide senior leaders the bottom line up front (BLUF) by summarizing the primary drivers to the aggregate assessment. They should be written at a strategic level and provide a summary overview of DCMA's perspective on program performance. Do not include any information that is not mentioned in the assessment narratives. State the impacts, issues, and risks driving the rating. Quantify contract and program impacts. Do not include the Assessment Color, rating period, or program name in the synopsis.
- (a) PAR Section 1. The PI must ensure that the PAR Section 1 data elements are completed as follows.
- <u>1</u>. DCMA CPA. The CPA provides an aggregate assessment of the program's health based on cost and schedule, using current technical issues or risks analyses, within the context of contracts administered by DCMA. The assessment must reflect DCMA's independent predictive analysis. Complete this section of the PAR using the criteria found in Appendix 4B. The CPA has two entries, Assessment Color and Assessment Narrative.
- <u>2</u>. DCMA PA. The PA provides an independent assessment for contracts administered by DCMA, regarding the contractor's ability to meet all required production goals and requisite capabilities for manufacturing, assembly, and integration; including hardware and software. EMD contracts will also be assessed with respect to their prototypes or impacts on the production contract deliveries. Complete this section of the PAR using the criteria found in Appendix 4C. The PA has two entries, Assessment Color and Assessment Narrative.
- <u>3</u>. DCMA MA. The MA provides a CBS assessment for the prime contractor(s). The contractor must establish and maintain an acceptable CBS for contracts subject to the Cost Accounting Standards and containing one or more of the six business system clauses. Refer to Appendix 4D for more information.
- <u>4</u>. Aggregate Rollup. Complete the Aggregate Ratings for the reporting month. When multiple contracts exist, the Lead CMO or cognizant CMO will determine the aggregate rollup method. Refer to the appropriate section of the Program Support Analysis and Reporting User Guide located on the Resource Page.
- (b) PAR Section 2. Supplemental Analysis for CPA, PA, and MA in PAR Section 1. Complete this section of the PAR using the criteria found in Appendices 4B and 4C.
- <u>1</u>. Supplemental Analysis for CPA, PA, and MA in PAR Section 1. Describe the aggregate methodology used and any extenuating circumstances affecting the aggregate rating.

- <u>2</u>. CPA Supplemental Analysis. Narrative that reinforces the drivers of the CPA rating and supplements PAR Section 1. Include the following or "no additional information" if these do not apply:
- $\underline{a}$ . For contracts, CLINs, and DOs discussed in PAR Section 1.1 with ratings driven by cost:
  - Substantiate the methodology for EAC<sub>DCMA</sub> development, include the values for risks and MR use and other assumptions and rationale for developing the EAC<sub>DCMA</sub>
  - If there has been an OTB, assess the VAC<sub>DCMA</sub>% against the Contract Budget Base to maintain visibility
- <u>b</u>. Watch items that were not discussed in PAR Section 1.1 (CPA Narrative) and do not currently impact the CPA rating; identify them as watch items.
- <u>3</u>. PA Supplemental Analysis. Supplemental analysis that reinforces the drivers of the PA rating. Include the following or "no additional information" if these do not apply:
- <u>a</u>. Watch items that were not discussed in PAR Section 1.2 (PA Narrative) and do not currently impact the PA rating; identify them as watch items.
- $\underline{\mathbf{b}}$ . Any risks or issues identified in the analysis of the Production Supportability Table.
- 4. MA Supplemental Analysis. Include analysis that reinforces the drivers of the MA rating. Additional details derived from the Contract Business Analysis Repository (CBAR) or the ACO that may warrant attention. Use this section to report any major subcontracts with disapproved CBS that may directly or indirectly impact the program. If there is no additional information to report, then state "No additional information."
- <u>5</u>. Supply Chain Supplemental Analysis. Provide a synopsis of the narrative that identifies what Supply Chain aspects are impacting the rating of the program.
- (c) PAR Sections 3 and 4. The PI must ensure that the PAR Sections 3 and 4 data elements are completed as follows.
- <u>1</u>. Program Office Requested Data and Specific Reporting. Include any other information that has been requested by the Program Office. This includes any Foreign Military Sales (FMS) contract information that the Program Office has requested. If there is no requested data or specific reporting, annotate "Not Applicable."
- <u>2</u>. Accuracy of PI Information. In order to assure the pre-populated PAR information is correct, the PI must review the information for currency prior to submitting the PAR for review and approval.

- <u>3</u>. Attachments. Do not upload attachments unless they are absolutely necessary to tell the story or required by specific written requirements. This includes Support PARs, eFITs, or EVM inputs.
- **b. PAR Review and Approval.** After the draft PAR has been submitted for review in Integrated Workload Management System (IWMS), all applicable DCMA organizations (e.g., CMO Leadership, Operational Units, and Headquarters) have the opportunity to review the draft PAR. Review comments must be inserted in the IWMS PAR comment feature within the following 3 business days. The intent of using the IWMS comments sections is to have a common area to improve PAR quality before finalization. Visibility and documentation of these comments and associated changes provide traceability, documentation, and insight to possible training shortfalls and gaps for future mitigation through manuals and other venues. CMO personnel must manage PAR improvement efforts through IWMS. Edits cannot be made after PAR approval. The CMO Commander or Director is ultimately responsible and is the approval authority for PAR content. The PAR approval due date for these quarterly submissions is NLT the 6th business day of the month for the program group to which they are assigned. (Subparagraph 1)
- (1) PI Initiates the Agency Review Process. The PI must initiate the Agency PAR review process per the appropriate section of the Program Support Analysis and Reporting User Guide located on the Resource Page in accordance with the timeline in Figure 2.
- (2) Program Management Office (PMO) Draft PAR Review. The PI must send a draft copy of the quarterly PAR to the PMO for review and comment by the last business day of the month. The PI must wait at least 3 business days from PMO submission to allow for PMO feedback prior to PAR submission for approval. The PMO has the opportunity to comment prior to the PI making the assessments available to DCMA management and possible dissemination outside the Agency. The PI must inform the PMO that information contained within the documents may be required to input into DAMIR if subjected to DAES reporting. If, after the 3 day window, the PMO has not provided any comments, the PI may consider this concurrence.
- (3) PI Reviews Comments. The PI must review all comments for potential inclusion into the PAR.
- (4) PI Updates PAR. Based on the comments received from all reviewers, the PI updates the draft PAR. The PI must not make any updates to the draft PAR based on PMO comments which question our assumptions, conclusions, or independent assessment of the program. The PI must, however, make updates to the draft PAR to correct any misstated facts.
- (5) CMO Commander or Director Reviews PAR. The CMO Commander or Director or designee must review the entire draft PAR submitted for approval. Returned PARs must have comments explaining the reasons. Minimum elements to consider during review:
  - (a) Evaluate overall structure, readability, and an active voice format.
  - (b) Ensure PAR is free from spelling and grammatical errors.

- (c) Ensure the issue or risk, root cause, mitigation strategy, contract or program impact, and DCMA analysis are clearly stated.
  - (d) Consistent data format to include date and dollar.
- (e) Ensure real-time, objective communication with the PM on development and content of the program assessments.
- (6) CMO Commander or Director Approves PAR. The CMO Commander or Director or designee must approve all PARs ready for release. There is no method for editing a PAR after approval as it becomes an official document. Further correction can only be accomplished by cancelling and republishing a new PAR or through PNs.
- (7) PI Utilizes Customer Feedback. The PAR contains a survey link for customer feedback. When a customer completes the survey, the feedback is provided to the CMO via DCMA Headquarters. The CMOs should consider this feedback as an opportunity to improve future reporting.
- **c. PAR Distribution.** PARs must be distributed to our external acquisition partners in accordance with the appropriate section of the Program Support Analysis and Reporting User Guide located on the Resource Page within 1 business day after PAR approval.
- **d. PAR Quality.** The Operational Unit representatives must provide an independent evaluation of the quality of PARs developed by the CMOs. The purpose of this is to focus Agency efforts on improving the quality of its program reporting. Coupled with these reviews for quality is an engagement with the CMO personnel to facilitate the improvement through collaboration when the PAR is considered to be of insufficient quality. CMOs have the option to use the PAR Scoring Rubric to perform a self-assessment.
- (1) Operational Unit Identifies PARs to be Reviewed. The applicable Operational Unit representative must develop a plan for evaluating the quality of the PARs under their cognizance.
- (2) Operational Unit Reviews PAR Using Scoring Rubric and Rework Metric. The Operational Unit reviews their PARs using the Scoring Rubric and Rework Metric according to their plan.
- (3) Operational Unit Provides PAR Score, Feedback, and Recommendations to the PI, PI FLS, and CMO Commander or Director. The Operational Unit must provide the results of their review to the CMO Commander or Director, the PI FLS, and the PI at a minimum. The results of the review should include the completed PAR Rubric coupled with any recommendations for improvement that should be incorporated into the next PAR.
- (4) Operational Unit and CMO Jointly Develop and Implement Get Well Plan. If the results of an Operational Unit PAR quality review is a score of less than 85 percent, then a get well plan must be jointly developed between the Operational Unit representative and representatives from the CMO. The purpose of the get well plan is to develop an action oriented approach to impart the requisite knowledge and skills so that subsequent PARs will be developed which are of a sufficient quality. The plan must, at a minimum, include the steps to be taken to

improve future PAR quality coupled with estimated dates in which each of these steps will be completed. The plan will then be implemented by the estimated dates.

- (5) Operational Unit and CMO Utilize Scoring Rubric and Rework Metric. If the results of the initial PAR quality review were a score of less than 85 percent, then a follow-up review of a subsequent PAR for that program must be completed by the applicable Operational Unit representative using the complete Scoring Rubric and Rework Metric. The results of the follow-up review must be distributed to the same CMO personnel as the original results.
- (6) Operational Unit Loads PAR Scores. The Operational Units check out the PAR Scoring Rubric spreadsheet from the DAES Strategic Metrics (PAR Rubric) library of the MPS DAES Site and update the spreadsheet tabs, corresponding to the programs being reviewed, by the last business day of the report month. A link to the MPS DAES Site is located on the Resource Page.
- (7) PM&BI Provides Agency metrics to DCMA Director. The PM&BI Executive Directorate must provide the DCMA Director with metrics that synopsizes the results of the PAR quality evaluations performed throughout the period.
- **e. PAR Blackout.** The quarterly PAR submitted may contain source selection sensitive information. Caution must be given to programs with ongoing source selections so that competition sensitive information is not released. Source selection as defined in Federal Acquisition Regulation 2.101 and 3.104-4 must be excluded from DAES Assessments. Other information which could jeopardize the competitive nature of a successful source selection must also be excluded. Only DCMA personnel with a need to know will have access to a PAR for a source selection sensitive program. PIs should be aware of all circumstances where a program is subject to source selection restrictions. Information pertaining to the establishment of program Blackout is contained in DCMA-MAN 3101-01, "Program Support Life Cycle."

#### 4.2. PROGRAM NOTIFICATION (PN).

**a. Summary.** PNs are used to communicate updates and observations in addition to an independent assessment of significant issues, risks, or opportunities affecting a program when the reporting timeframe is outside the standard PAR cycle. The PN, just as with the PAR, is an official DCMA product of record. However, the PN is a near-real time reporting tool allowing for the dissemination of actionable acquisition insight in a more streamlined fashion than the PAR. A PN is required to officially inform other customers even if this information has already been provided to the Program Office by other means. SPIs utilize PNs in much the same fashion as PIs. However, SPI PNs must be supplied to the next higher tier SPI or the PI as applicable. The PI's CMO Commander or Director is the release authority for any PN that is based on or contains SPI PN information.

### b. Minimum Conditions Requiring a PN. PNs must be generated when:

(1) The CMO has determined that the information in the previous PAR or PN has changed in a significant way, not only when a rating changes.

- (2) The CMO identifies an issue or risk that changes the CPA, PA, and/or MA ratings unless those changes can be incorporated into the next PAR in a near-real time basis.
- (3) There is any significant evolution to an event described in the immediately preceding PAR or PN.
- (4) A program related event has been submitted as an Agency Weekly Activity Report (WAR) entry.
  - (5) Any significant updates to previous reported forecasted dates.
  - (6) Upon stakeholder request.
- **c. PI or SPI Develops PN.** PI or SPI develops PN according to the appropriate section of the Program Support Analysis and Reporting User Guide located on the Resource Page.
  - **d. PN Review.** The following process must be used for PN review.
- (1) PI/SPI Forwards the Completed PN for Review. The PI must submit the completed PN to the Lead CMO Commander or Director, or their designee, for review. SPIs may draft PNs for the PI but must upload them to the Program Notification tab in the program's PST Collaboration Site. The PI will review the SPI PN for content, the need to integrate with other draft PNs, and make a determination if the PN will be released. The PI then coordinates any updates prior to the PI submitting the PN to the Lead CMO for review.
- (2) Lead CMO Commander or Director Review of PN. PNs must be reviewed by the Lead CMO Commander or Director prior to release to ensure PN adequacy. When the Lead CMO Commander or Director completes their review, they may approve, disapprove with comments, or reject the PN. SPI PNs do not require formal approval by their CMO Commander since only the approved PNs will be releasable outside of DCMA.
- (3) Lead CMO Commander or Director Communicates Changes to PI. If the Lead CMO Commander or Director is either returning the PN back to the PI for changes or is deleting the PN, specific comments should be made to the PI clearly describing the rationale for either returning or deleting the record. If the PN is returned with comments, the PI must address those comments and resubmit the PN for review and approval.
  - **e. Approve PN.** The following process must be used for PN approval.
- (1) PN Attachments. The intention is not to include any attachments unless they are absolutely necessary to tell the story.
- (2) PI Converts PN to Portable Document Format (PDF). Prior to approval, the PI must convert the PN to a PDF.
- (3) Lead CMO Commander or Director Approves PN. The Lead CMO Commander or Director, or their designee, must digitally sign the PN when it is ready for release. The Lead CMO Commander or Director will return the PN to the PI.

- (4) Posting the PN. PNs will be loaded into the program's PST Collaboration Site.
- **f. PN Distribution.** PNs must be distributed to our external acquisition partners utilizing the same means as PAR distribution.
- **g. PI Incorporates PN Information in Next PAR.** Information contained in PNs must be addressed in the next PAR for continuity purposes. For example, if the CMO has used a PN to identify the disapproval of a CBS and the decision was subsequently made to exercise a withhold of payment, then this should be addressed in the next PAR.

### 4.3. DAES ASSESSMENT INPUT.

- **a. Summary.** All DAES reportable programs are submitted to DAMIR on a quarterly basis according to the Group Assignment. Each program has a CPA, PA, and MA color rating, synopsis, and narrative assessment entered into DAMIR by the responsible CMO. DAMIR access must be requested using DCMAF 3101-02-01, "DAMIR Access Request" following the guidelines outlined in the appropriate section of the Program Support Analysis and Reporting User Guide. See the Resource Page for the form as well as the user guide. The DAES assessments uploaded into DAMIR are derived entirely from the ratings, synopses and Section 1 narratives of the PAR. All DAES reviews and comments must occur during the PAR review process as described in paragraph 4.1.
- **b. PI Loads PAR Section 1 Ratings, Synopses, and Assessments into DAMIR.** NLT the 7th working day of the month, the DAMIR Action Officer must create and enter a color rating, synopsis, and narrative for each assessment area (CPA, PA, MA) for assigned programs.
- c. CMO Commander, Director, or Deputy (Supervisor) Reviews Input Assessments in DAMIR. NLT the 7th working day of the month, the CMO Commander, Director, or Deputy (Supervisor) reviews the DAMIR Input Assessments for the same criteria in Appendices 4B and 4C, and paragraph 4.1.a. Upon review completion, the PI (Action Officer) and the CMO Commander, Director, or Deputy (Supervisor) must promote all DAMIR assessments to PM&BI by selecting the "Release" button.
- **d.** PM&BI Releases DAES Assessment in DAMIR. The MPS Division is responsible to perform a final review of all program assessments and execute the release authority role to OUSD (AT&L) in DAMIR. This role must ensure all program assessments required for the month have been promoted by the CMO Commander, Director, or designee. Release Authority will ensure no obvious errors are present prior to releasing the program synopsis and assessments NLT the 8th working day of the month. The MPS Division has authority to make changes, updates, and release assessments to facilitate on-time release in DAMIR. Any changes made by the MPS Division will require a notification to the OU and CMO.
- **e.** Operational Unit Provides DAES Rework to PM&BI/Lead CMO/CMO. Operational Units must record rework results on the Resource Page.

# **APPENDIX 4A: PAR NARRATIVE CRITERIA**

#### 4A.1. PAR GUIDELINES.

- **a. Readability.** The narratives must have a consistent flow (logic) and be clear, concise, and primarily use active voice. Write PARs for Senior Leadership Review and always start with the BLUF. Narratives must be written to convey the most significant rating driver first. Bullets or subparagraphs may be useful for outlining multiple issues or events. Titles for paragraphs may be useful in identifying main issues.
- (1) Overall Formatting Guidelines. The PI must use the following formatting guidelines throughout the PAR.
  - (a) Use a consistent date format throughout the PAR narratives.
- (b) Spell out all acronyms the first time used in each assessment area (CPA, PA, MA), with the exception of assessment Synopses and acronyms identified in the "PAR Common Acronym List" document. See the DCMA-INST 3101 Resource Page.
- (2) Dollar Rounding Conventions. Use the following dollar rounding conventions in your PAR. The exception is within tables, when consistent dollar convention should be used (e.g., thousands or millions).
- (a) Do Not Use Commas. Use the next higher convention (i.e., use \$1.32B instead of \$1,322.12M).
- (b) Use At Least One Non-Zero Digit Prior to Decimal. Have at least one non-zero digit prior to the decimal (i.e., \$2.32M instead of \$0.002B). Use up to two decimal places.
- (c) Different Assessment Narrative Convention is Acceptable. A different convention is acceptable in the assessment narratives if it makes sense (i.e., The DCMA EAC is \$13.28B with a VAC of \$112.45M).
- (3) Synopses. The CPA, PA, and MA synopses provide senior leaders the BLUF by summarizing the primary drivers to the aggregate assessment. They should be written at a strategic level and provide a summary overview of DCMA's perspective on program performance. Synopses are limited to 350 characters, including spaces. Do not include any information that is not mentioned in the assessment narratives. State the impacts, issues, and risks driving the rating. Quantify contract and program impacts. Do not include the Assessment Color, rating period, or program name in the synopsis.
- **b.** Content Criteria. Issue and Risk Assessments must contain the following information as a minimum:
- (1) Issue or Risk Description. Describe the issue or risk. When addressing issues or risks that contribute to and/or drive the CPA, PA, and MA color criteria, include the nomenclature of the material (e.g., name, description), the Prime Contract number(s), and the

Subcontractor name, if applicable. When discussing color changes in the ratings from the previous PAR, an example format to use is "The (color) rating is (the same as, worse than, better than) the last quarter's PAR rating due to (risk or issue)."

- (2) Root Cause. Document the root cause or source that resulted in the issue occurring; include DCMA's assessment of the root cause.
- (3) Impact in Dollars and Days. Using DCMA predictive analysis, describe issue and risk impacts, quantified in dollars and days. These dollar and day impacts, discovered from functional surveillance, are critical for forecasting cost overruns, schedule slips, and executive level decision making for programs and EVM reporting contracts.
- (4) Contractor's Mitigation Plan. Identify the contractor's mitigation plan including any corrective actions taken to resolve the issue or mitigate risk. Include the DCMA independent assessment of the adequacy of contractor actions and the likely outcome.
- (5) Path Forward. Document possible courses of action that DCMA or the PMO can take to resolve the issue or mitigate the risk.
- (6) Assessments Disclosure Criteria. Assessments for programs under solicitation, selection of sources, or award of contracts must not disclose contractor bid, proposal, or source selection information before the award of a Federal agency procurement contract to which the information relates.
- (7) Narratives References. Narratives in PAR Section 1 must not reference other sections in the PAR.

## APPENDIX 4B: CONTRACT PERFORMANCE ASSESSMENT

**4B.1. CPA Color.** The minimum rating criteria, used for each contract/CLIN/DO/TI, are provided in Table 4, Cost Assessment Color Criteria and Table 5, DCMA Schedule Slip (Months) Color Criteria (CPA).

Table 4. Cost Assessment Color Criteria

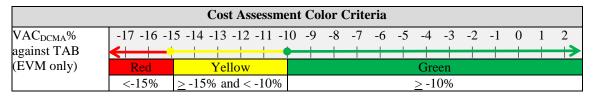
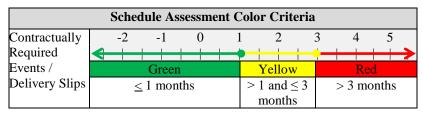


Table 5. DCMA Schedule Slip (Months) Color Criteria (CPA)



- **a.** Changing the CPA Assessment Color. The PI may change the CPA Assessment Color due to additional analysis/factors, with an explanation provided in the assessment narrative. For example, delivered items but conditionally accepted or with waiver or deviation, disapproved CBS, test failures, or high use of MR could lead a PI to downgrade the CPA Assessment Color.
- **b. For Disapproved EVMS or EVMS Level III or IV CAR.** For EVMS that is disapproved, or having a transmitted EVMS Level III or IV CAR:
- (1) Lead CMO Requests Impact Statement. The Lead CMO requests an impact statement from the EVMS Center which may be as little as a statement that disapproved EVMS does not impact the CPA (e.g., no EVM reporting contracts on program).
- (2) Aggregate Assessment Color Default. The aggregate assessment color for CPA must not be Green when the EVMS Center impact statement has indicated that the cost or schedule EVM data used to rate the CPA is not reliable.
- (3) Impacts Explanation in Assessment Narrative. An explanation is included in the assessment narrative of impacts to the analysis (i.e., determination of EAC).
- c. Government Furnished Equipment (GFE) or Government Furnished Material (GFM) Incorporated into CPA Ratings. GFE or GFM that impacts the contract will be incorporated into the CPA ratings. FMS are not included in the Table, nor incorporated into the aggregate CPA ratings. Sustainment contracts and contracts that are fully shipped or have all DD Form 250s processed may be excluded, if not applicable to the aggregate rating.

- **4B.2. CPA Narrative.** The CPA narrative provides data, information, and analysis focused on supporting the Assessment Color. The narrative is limited to 3,850 characters. Begin the assessment with the Bottom Line; this could be a copy of the synopsis or similar expanded statement. Address changes in Assessment Color from the previous PAR. When contract issues or risks are discussed that would result in a worse rating than the Aggregate Assessment Rating, then the Aggregate Rating must be briefly explained.
- a. Based on DCMA's independent assessment of current and future impacts, comment on contracts, CLINs, DOs, or Technical Instructions (TI) driving the Aggregate Assessment Rating include:
  - (1) Impact of significant cost, schedule, and technical issues or risks.
  - (2) Issue or risk description.
  - (3) Root cause.
  - (4) Contractor mitigation strategy.
  - (5) DCMA's independent assessment of that mitigation strategy.
  - (6) Supplier or subcontractor name for supplier issues or risks.
  - (7) Issues, risks are listed in order of significance.
  - b. For shipbuilding programs, specify the GFE subprogram being assessed.
- c. Maintain a consistent flow of information from current period's PA and MA. For example, if schedule delays drive the PA rating, or if business system in the MA is disapproved (e.g., EVMS), then incorporate or address the issues and risks from the PA and MA in the CPA.
- d. For contracts requiring EVM reporting, for contracts, CLINs, DOs, and TIs where the aggregate rating is Yellow or Red, include, at a minimum:
  - (1) EAC<sub>DCMA</sub>, VAC<sub>DCMA</sub>, and VAC<sub>DCMA</sub>% values
- (2) A discussion of VAC<sub>DCMA</sub> drivers; risks to remaining effort and the availability of MR to offset any risks, methodology, and observed trends indicating changes in future performance
- (3) EAC $_{Ktr}$  if there are significant differences compared to EAC $_{DCMA}$  (i.e., more than 5 percent) include values and explanation of difference
- (4) A discussion of any known effects on program milestones or contractually required events, including projected schedule slips
- (5) An evaluation of performance estimates and trends against program performance thresholds, objectives, and Technical Performance Measures (TPM) impacting or potentially impacting contract cost and schedule.

- e. For contracts not requiring EVM reporting, for contracts, CLINs, DOs, and TIs where the aggregate rating is Yellow or Red, include, at a minimum:
- (1) An assessment of contract schedule performance and identify contractual deliveries and events that will be late or are projected late to schedule by using the schedule assessment criteria in Table 5 and by incorporating:
- (a) Issues and risks that could jeopardize the contractor's ability to meet contractual requirements (e.g., staffing levels, labor rates, achievement of milestones, and technical goals)
- (b) Forecasts on remaining deliveries based on current delivery trends or functional assessments; include independent DCMA expected delivery date and quantified number of units to be delivered (delivery assessments do not need to include CDRLs)
- (c) Evaluations of performance estimates and trends against program performance thresholds, objectives, and TPMs impacting or potentially impacting contract cost and schedule.
- (2) Disapproved EVMS or transmitted EVMS Level III or IV CARs that do not impact the CPA rating.

## **APPENDIX 4C: PRODUCTION ASSESSMENT**

**4C.1. PA Color.** Tables 6, 7 and 8 provide the minimum rating criteria for each EMD or production contract, CLIN, DO, or TI listed in the "Table 1.0, Contract Aggregate Assessment" with ability to downgrade (e.g., Yellow to Red) due to further analysis. Consider the relevant items in Table 7 which influence contractually required events, deliveries, and production readiness. Expand on the root cause, impact, and how the issue affects contractually required events. The Production Assessment incorporates current issues and risks, even when that risk is projected to impact the program in the future. GFE or GFM that impacts the contract will be incorporated into the PA ratings. FMS contracts are not included in the Aggregate Table, nor incorporated into the aggregate PA ratings. Sustainment contracts and contracts that are fully shipped or have all DD Form 250s processed may be excluded, if not applicable to the aggregate rating.

**Schedule Assessment Color Criteria** -2 -1 0 2 3 Contractually 4 5 Required Events / Yellow Green Delivery Slips < 1 months > 1 and  $\leq 3$ > 3 months months

Table 6. DCMA Schedule Slip (Months) Color Criteria (PA)

**Table 7. Production Assessment Criteria** 

Production Assessment Criteria		
Color Rating	Criteria for Prime and Supply Chain	
GREEN:	No non-business system transmitted Level III/IV CARs exists	
	No Open Failure Review Board (FRB) action impacting delivery or	
	contractual events	
	Open Priority II Software Defect closure rate meets supplier plan with no	
	projected impact to SW build delivery or delivered product capabilities	
	No open Priority I Software Defect	
YELLOW:	One or more non-business system transmitted Level III/IV CARs exists	
	Or One or more draft Level III/IV CARs exists that impacts or may impact	
	delivery schedules or requisite capabilities for manufacturing, assembly, or	
	integration	
	<b>Or</b> Open Priority II Software Defect closure rate impacts planned SW build	
	delivery date or delivered product capabilities	
	<b>Or</b> Open Priority I Software Defect exists, with no projected impact to the	
	SW Build delivery date or delivered product capabilities	
	Or Open FRB action impacting delivery or contractual test events, with	
	Root Cause and CAP identified	
RED:	One or more transmitted Level III/IV CARs exist that impacts or may	
	impact delivery schedules or requisite capabilities for manufacturing,	
	assembly, or integration	
	Or Open Priority I Software Defect exists that impacts planned SW build	
	delivery date or delivered product capabilities	
	Or Open FRB action impacting delivery or contractual test events, with no	
	Root Cause or CAP identified	
	Or Product decertification by Program Executive Officer or Program Office	
	Or Non-acceptance of product by DCMA	

**Table 8. Production Assessment Checklist** 

Production Assessment Checklist		
Assessment Criteria	Assessment Criteria Explanation	
Contractor-Supplier Relationships	Contractor has controls in place for the oversight and surveillance of subcontract /supplier efforts, evaluates their sources for cost, quality and technical performance. Make-or-buy program is applied in the best interest of the Government.	
Engineering Design/ Configuration Stability	Are requirements stable? Are there test issues requiring redesign? Are product specifications changing to accommodate cost/schedule? Are there open requests for deviations, waivers, or variances? Are there open major Engineering Change Proposals? What is the status of TPMs? Are there issues/risks associated with system engineering reviews that could impact production (e.g., Preliminary Design Review (PDR), Critical Design Review (CDR), Physical Configuration Audit (PCA), Functional Configuration Audit (FCA) or testing)?	
Production Schedule Status	What is the program production status (ahead or delinquent to schedule)? What is the impact of this performance (e.g. will not meet established schedule, achieving entrance/exit criteria)?	
Supply Chain	Are there issues/risks associated with subcontractors impacting the prime contractor? What is the impact to cost, schedule, and technical performance? Are these issues/risks being addressed by the prime or subcontractor and are the corrective actions preventing them from adversely impacting the program?	
Production Resources	Does the contractor have adequate production resources and manufacturing capacity to meet production goals?	
Product Quality Issues	Are there any process capability issues that could impact production/production readiness? Are there any open PQDRs? Are the PQDRs closed in a reasonable time? Evaluate scrap/rework rates, First Time Through, First Time Yield, First Pass Yield as an indicator that further analysis or improvements may be necessary.	
Quality Mgmt System (QMS)	Does the contractor adhere to its QMS and follow its own policies? Has there been a company audit that identified findings which could impact the product?	
Manufacturing Readiness Level (MRL)	Is the contractor ready for production? What is the MRL for the contractor? What is DCMA's Manufacturing Risk Assessment (MSRA)	

- **4C.2. PA Narrative.** The PA narrative provides data, information, and analysis focused on supporting the Assessment Color. For aggregate assessments that are rated Green, provide justification to support the assessment. If identifying issues and risks in a Green assessment, consider downgrading to Yellow to raise awareness of the issues or risks. The narrative is limited to 3,850 characters. Begin the assessment with the Bottom Line; this could be a copy of the synopsis or similar expanded statement. Address changes in Assessment Color from the previous PAR. When contract issues or risks are discussed that would result in a worse rating than the Aggregate Assessment Rating, then the Aggregate Rating must be briefly explained.
- a. Based on DCMA's independent assessment of current and future impacts, comment on contracts, CLINs, DOs, or TIs driving the Aggregate Assessment Rating include:
  - (1) Impact of significant cost, schedule, and technical issues or risks.
  - (2) Issue or risk description.
  - (3) Root cause.
  - (4) Contractor mitigation strategy.
  - (5) DCMA's independent assessment of that mitigation strategy.
  - (6) Supplier or subcontractor name for supplier issues or risks.

- (7) Issues, risks are listed in order of significance.
- (8) When corrective action or risk mitigation is projected to resolve an issue or risk in a future quarter, this predictive analysis rating change improvement must be identified in the corresponding assessments in Sections 1 and 2 of the PAR, but is not incorporated into the current period assessment rating until the issue or risk has been actually resolved.
- (9) Impacts of transmitted Level III and IV CARs, address actual or proposed date of submission for the CAP and DCMA's assessment of the contractor's status towards closing the CAR should be included in the narrative.
  - b. Maintain a consistent flow of information from current period's CPA and MA.

# **APPENDIX 4D: MANAGEMENT ASSESSMENT**

**4D.1. MA Color.** The minimum rating criteria are provided in Table 9, Management Assessment Criteria, to determine the Assessment Color. If an EVMS is disapproved or has a transmitted EVMS Level III or IV CAR, request an impact statement from the EVMS Center to determine impact to CPA rating and narrative.

**Table 9. Management Assessment Criteria** 

Management Assessment Criteria		
<b>Color Rating</b>	Criteria for CBS Status	
GREEN:	All six CBSs are Approved, Not Evaluated, or Not Applicable and there are no transmitted or draft Level III/IV CAR against a CBS.	
YELLOW:	<ul> <li>All six CBSs are Approved or Not Evaluated AND:</li> <li>There is a draft Level III/IV CAR against a CBS; or</li> <li>An initial determination has been issued to the contractor identifying significant deficiencies in a CBS approval/disapproval process; or</li> <li>The CBS is under a legacy review with a Level III/IV CAR, but no final determination to disapprove the system has been made.</li> </ul>	
RED:	One or more CBS is disapproved or has a transmitted Level III/IV CAR against a CBS not under a legacy review	

- **4D.2. MA Narrative.** The MA narrative provides data, information, and analysis focused on supporting the assessment. The narrative is limited to 2,500 characters. Begin the assessment with the Bottom Line; this could be a copy of the synopsis or similar expanded statement. Address changes in Assessment Color from the previous PAR. Non-Evaluated or Disapproved CBS ratings must have the following in the MA Narrative:
  - (1) A summary statement
  - (2) Address changes in Assessment Color from previous quarter in the first paragraph
- (3) Pertinent information regarding DCMA's determination of CBS approval or disapproval or plans for the ACO to issue a final determination
- (4) Disapproved Systems must include the drivers for disapproval (e.g., for EVMS, include the guideline numbers and titles that resulted in the disapproval; for Material Management and Accounting System, include the standard)
- (5) Impact of transmitted Level III or IV CARs supporting CBS disapproval (if there is no impact, state that); address actual or proposed date of submission for the CAP, DCMA's

assessment of the contractor's status towards closing the CAR, and estimated time for follow-up review

- (6) Identify if a withhold applies to the disapproved CBS. If so, discuss:
- (a) Whether the payment withhold applies to the program. If it does not apply to the program, still identify the withhold but state that it does not impact the program.
  - (b) The estimated withhold percent amount
- (c) Whether the withhold is against progress payment, performance based payments, or interim payments billed under cost, labor-hour, or time and materials contracts
- (7) Comment on significant CBS issues, their impact to individual contracts (if there is no impact, state that), and contractor's ability to execute the contract
  - (8) Upcoming reviews planned for a CBS.

## **GLOSSARY**

- **G.1. DEFINITIONS.** Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.
- **ACAT I.** Programs categorized as Major Defense Acquisition Program (MDAP) or Major Automated Information Systems (MAIS) programs that have been designated ACAT I by the Milestone Decision Authority.
- **ACWP.** The total dollars spent on labor, material, subcontracts, and other direct costs in the performance of the contract SOW. These costs are controlled by the accounting general ledger and should reconcile between the accounting system and EVMS. ACWP is independently reported by the contractor's accounting system. Simply stated: "actuals."
- **BCWP.** Dollarized value of all work actually accomplished in a given time period or Earned Value. This is equal to the sum of the budgets for completed WPs, completed portions of open WPs, apportioned effort earned on the base tasks, and the value of LOE activities. BCWP is not realized until the work is completed.
- **BCWR.** Represents that portion of the budget for work not yet accomplished within a Control Account. It is the difference between the BAC and the BCWP<sub>CUM</sub>.
- **BCWS.** Dollarized value of all work scheduled to be accomplished in a given time period or Planned Value. The sum of the performance budgets for all work scheduled to be accomplished within a given time period. This includes detailed WPs, apportioned effort, LOE packages, planning packages, and Summary Level Planning Packages.
- **BEI.** The BEI metric is an IMS-based metric that calculates the efficiency with which tasks have been accomplished when measured against the baseline tasks at a Status Date. BEI tasks do not include Summary or LOE tasks.

$$BEI = \frac{Tasks \ Completed}{Baseline \ Count} = \frac{Qty \ of \ Tasks \ Completed}{Qty \ of \ Tasks \ Completed \ + \ Qty \ of \ Tasks \ Missing \ Baseline \ Finish}$$

- **CMT.** The CMT reviews new contracts; performs an initial contract review; determines skill-set and PST organizational requirements to support new major programs; and as deemed necessary by the ACO, conducts a Post Award Orientation Conference with all CMT members assigned to that contract.
- **Cognizant ACO.** The administrative contracting officer responsible for performing the duty per this manual, includes the DACO, CACO and ACO.
- **CPI.** CPI is an efficiency factor representing the relationship between the performance accomplished (BCWP) and the actual cost expended (ACWP). CPR/IPMR Format 1 contains the BCWP and ACWP data. CPI can be calculated for current period (monthly) or cumulative (to date).

$$CPI_x = \frac{BCWP_x}{ACWP_x}$$

where: x is current period (cur) or cumulative (cum).

**Critical Path.** Critical path is a sequence of discrete lower level tasks/activities in the network that add up to the longest overall duration through an end point. The critical path determines the shortest time possible to compete the contract. Any delay of an activity on the critical path directly impacts the baselined completion date; i.e., there is no float on the critical path. Lower level tasks/activities along the critical path have the least amount of float/slack (scheduling flexibility) and cannot be delayed without delaying the finish time of the end point effort.

CV. The difference between BCWP and ACWP. It can be measured using cumulative (CUM) or current (CUR) values at either the WP or the contract level. CPR/IPMR Format 1 contains the BCWP and ACWP data as well as the correlating CVs. The CV% metric quantifies the magnitude of the CV by dividing CV by BCWP and multiplying by 100. The formulas for calculating CV and CV% are:

$$CV_x = BCWP_x - ACWP_x$$
 and  $CV_x\% = \frac{CV_x}{BCWP_x} \times 100$   
where: x is current period (cur) or cumulative (cum).

**DAES.** Principal mechanism for tracking programs between milestone reviews. It is both a reporting and review process serving two primary purposes: (1) Provide awareness of the execution status of all reporting programs, and (2) Provide assessments that enable identification of emerging execution issues that warrant the attention of senior leadership.

**DAMIR.** OSD tool used to communicate program assessments and information across the DoD Acquisition Enterprise.

**MAIS.** DoD acquisition program for an automated information system that is either designated by the Milestone Decision Authority as a MAIS, or estimated to exceed certain dollar levels.

**Major Programs.** A term used by DCMA to identify those programs with specific reporting requirements. Major Programs include (unless approved by exception):

- ACAT I/MDAPs
- DAES programs (excluding MAIS)
- Missile Defense Agency Ballistic Missile Defense System programs
- Strategic Systems Programs
- Additional programs or sub-programs designated by the PM&BI Executive Director.

**MDAP.** ACAT I programs are MDAPs. Programs estimated by the OUSD(AT&L) to require eventual expenditure for Research, Development, Test and Evaluation of more than \$365 million (FY 2000 constant dollars) or procurement of more than \$2.19 billion (FY 2000 constant dollars), or those designated by the OUSD(AT&L) to be MDAPs.

**Memorandum of Agreement.** The program Memorandum of Agreement is a bi-lateral or multi-lateral document endorsed by the CMO Commander or Director and PMO Manager, which identifies the goals of DCMA support.

**MR Consumption Ratio.** MR Consumption Ratio is the ratio of percent Complete to Percent MR.

$$MR Consumption Ratio = \frac{Percent Complete}{Percent MR}$$

**Operational Unit.** DCMA organizational entity charged with ensuring mission accomplishment for their organization. For purposes of this manual only, Operational Units include: East, Central and West Regions, the International Directorate, and the Special Programs Directorate.

**Performance Assessments and Root Cause Analyses (PARCA).** Carries out performance assessments of MDAPs and conducts root cause analyses for those MDAPs with Nunn-McCurdy breach status or when requested by senior DoD officials.

**Percent Complete.** Percent complete is the percentage of the amount of completed work to date to the PMB or BAC. The formula for percent complete (%):

Percent Complete (%) = %comp = 
$$\frac{BCWP_{cum}}{BAC} \times 100$$

**Percent MR.** Percent MR is the percentage of MR used to the amount of MR on the contract.

Percent MR = 
$$\frac{\text{Total Amount of MR Used}}{\text{Total Amount of MR Added to the Contract}} \times 100\%$$

**Post Award Orientation Conference.** A Post Award Orientation Conference may be held to perform a detailed review of the contract, specifically highlighting and discussing complex terms and conditions. The conference will ensure that all parties understand contractual requirements.

**Predictive Analysis.** The collection, examination, and synthesis of information and data from our on-site presence which states (in terms of future cost, schedule, and performance) what we forecast will happen based on our special knowledge of the supplier and program.

**PI.** Primary DCMA representative to the procuring customer and leads a PST comprised of functional experts. PI assesses contractor performance, predicts future performance, and makes actionable recommendations related to future programmatic efforts.

**PST.** The PST is a matrixed multifunctional team led by a PI which supports a major acquisition program. The PST may include functional specialists from contract administration, earned value management, quality assurance, engineering, software, manufacturing and production, supply chain management, as well as other functions.

**Report Month.** The month and year associated with the program's group.

**Reporting Level.** The reporting level specified in the CDRL. Usually at least at Contract Work Breakdown Structure (CWBS) level 3 except for high cost and high risk items were the level is established to ensure the necessary information for effective management control. It is not necessary for the reporting levels in different legs of the CWBS to be the same.

**Software Defects.** Priority I and II Software Defect terminology is determined by Contractor Command Media and Quality Management System (QMS) for definitions. Common software categorization and definitions of defects can be found in IEEE 12207.

**SPI**x. The Schedule Performance Index (SPI<sub>X</sub>) is an efficiency factor representing the relationship between the performance achieved or Earned Value or BCWP and Planned Value or BCWS. CPR/IPMR Format 1 contains the BCWP and BCWS data. SPI can be calculated for current period (monthly) or cumulative (to date).

$$SPI_{x} = \frac{BCWP_{x}}{BCWS_{x}}$$

where: x is current period (cur) or cumulative (cum).

**SPI.** Primary DCMA representative to either the PI or the next higher tier SPI. The SPI provides input to the PI concerning their independent assessment of the program element(s) they have been delegated. The SPI leads a SPST comprised of functional experts.

**SPST.** The SPST is a matrixed multifunctional team led by a Support Program Integrator which supports a significant element, subcontract, or subsystem of a major acquisition program.

**SV.** SV is the difference between BCWP and BCWS. CPR/IPMR Format 1 contains the BCWP and BCWS data as well as the correlating SVs. SV can be measured using cumulative (CUM) or current (CUR) values at either the WP or the contract level. The SV% metric quantifies the magnitude of the SV by dividing SV by BCWS and multiplying by 100. The formula for calculating SV and SV% are:

$$SV_x = BCWP_x - BCWS_x$$
 and  $SV_x\% = \frac{SV_x}{BCWS_x} \times 100$ 

where x represents cumulative (CUM) or current(CUR)

**TCPI.** TCPI is the ratio of work remaining (BCWR) and future cost of work remaining (ETC).

$$TCPI_{EAC} = \frac{BCWR}{ETC} = \frac{BAC^* - BCWP}{EAC - ACWP}$$

\*For DCMA the formula will use BAC at the WBS element level and TAB at the contract level.

**Watch Item.** Any issue, risk or observation that is not currently driving the rating but significant enough to report. Report watch items in Section 2 of the PAR.

#### G.2. ACRONYMS.

ACAT Acquisition Category

ACO Administrative Contracting Officer ACWP Actual Cost of Work Performed

ACWP<sub>CUM</sub> Actual Cost of Work Performed, cumulative

BAC Budget at Completion

BCWP Budgeted Cost for Work Performed

BCWP<sub>CUM</sub> Budgeted Cost for Work Performed, cumulative

BCWR Budgeted Cost of Work Remaining BCWS Budgeted Cost for Work Scheduled

BCWS<sub>CUM</sub> BCWS, cumulative

BCWS<sub>CUR</sub> Budgeted Cost for Work Scheduled, current reporting period

BEI Baseline Execution Index
BLUF Bottom Line Up Front

CACO Corporate Administrative Contracting Officer

CAP Corrective Action Plan
CAR Corrective Action Request
CBS Contractor Business System
CDR Critical Design Review

CDRL Contract Data Requirements List
CLIN Contract Line Item Number
CMO Contract Management Office
CPA Contract Performance Assessment

CPI Cost Performance Index

CPI<sub>CUM</sub> Cost Performance Index, cumulative

CPR Contract Performance Report

CWBS Contract Work Breakdown Structure

CV Cost Variance

DACO Divisional Administrative Contracting Officer
DAES Defense Acquisition Executive Summary

DAMIR Defense Acquisition Management Information Retrieval

DCARC Defense Cost and Resource Center

DCMA-INST DCMA Instruction
DID Data Item Description

DO Delivery Order

EAC Estimate at Completion

EAC<sub>DCMA</sub> DCMA's Estimate at Completion EAC<sub>Ktr</sub> contractor's Estimate at Completion

ECD Estimated Completion Date

ECD<sub>DCMA</sub> DCMA's Estimated Completion Date eFIT Electronic Functional Input Template

EMD Engineering & Manufacturing Development

ETC Estimate to Complete
EVM Earned Value Management
EVM-CR EVM Central Repository

EVMS Earned Value Management System

EVMSIG Earned Value Management System Interpretation Guide

FCA Functional Configuration Audit

FLS First Level Supervisor FMS Foreign Military Sales FRB Failure Review Board

GFE Government Furnished Equipment
GFM Government Furnished Material

IMS Integrated Master Schedule

IPMR Integrated Program Management Report IWMS Integrated Workload Management System

LOD Letter of Delegation LOE Level of Effort

MA Management Assessment

MAIS Major Automated Information System MDAP Major Defense Acquisition Program

MR Management Reserve

MRL Manufacturing Readiness Level

MSRA Manufacturing System Risk Assessment

NLT No Later Than

OSD Office of the Secretary of Defense

OTB Over Target Baseline
OTS Over Target Schedule

OUSD(AT&L) Office of the Under Secretary of Defense for Acquisition, Technology,

and Logistics

PA Production Assessment
PAR Program Assessment Report
PCA Physical Configuration Audit

PCSA Prime Control of Subcontractor Assessment

PDR Preliminary Design Review

PF Performance Factor
PI Program Integrator

PM&BI Portfolio Management & Business Integration Executive Directorate

PMB Performance Measurement Baseline

PMO Program Management Office

PN Program Notification

PQDR Product Quality Deficiency Report

PSP Program Support Plan PST Program Support Team

QMS Quality Management System

SAP Special Access Program

SCI Sensitive Compartmented Information

SPI Support Program Integrator
SPI<sub>X</sub> Schedule Performance Index
SPST Support Program Support Team

SOW Statement of Work SV Schedule Variance

TAB Total Allocated Budget

TCPI To Complete Performance Index

TI Technical Instruction

TPM Technical Performance Measure

VAC Variance at Completion

VAC<sub>DCMA</sub> DCMA's Variance at Completion

WBS Work Breakdown Structure

WP Work Package

## **REFERENCES**

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